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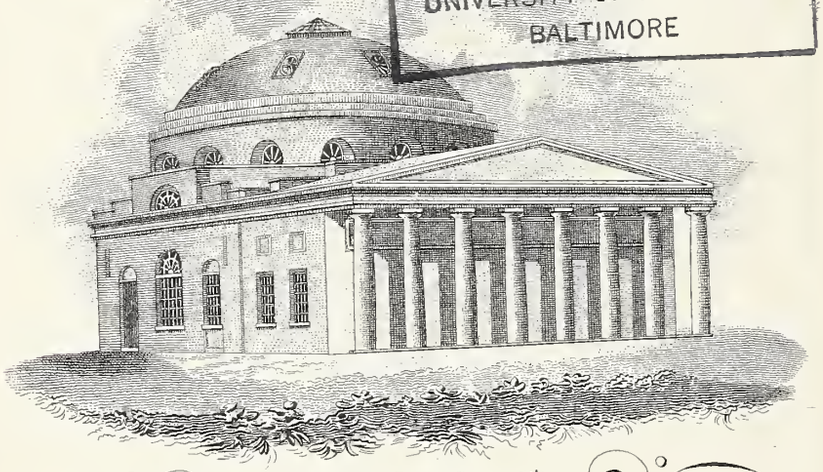

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The Journal

of the

Michigan State Medical Society

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VOLUME 49
1950

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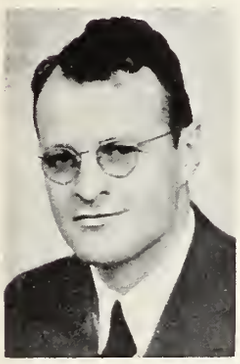

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of the Michigan State Medical Society

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AMA VOTES $25 DUES FOR 1950

The House of Delegates of the American Medical Association, at the Interim Session in Washington, D. C., on December 8, 1949, adopted $25.00 dues for active members of the American Medical Association for the year 1950. In a telegram of notification, George F. Lull, M.D., AMA Secretary and General Manager, states: "Said dues will be collected by state or county societies in accordance with local custom for collecting your own dues and will be transmitted to Secretary of the American Medical Association."

Up to this year, the AMA has never had any annual dues. A year ago it called on its members for a voluntary assessment of $25.00 to finance an educational program to acquaint the public with the dangers of compulsory health insurance or socialized medicine.

This action of the AMA House of Delegates was approved by the Executive Committee of The Council of the Michigan State Medical Society on December 21, 1949.

HOSPITALIZATION OF VETERANS RISING

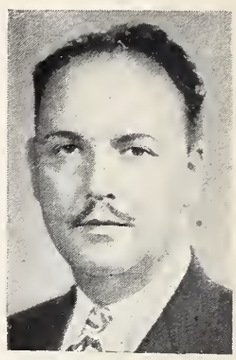
Latest monthly report by Veterans Administration shows that its hospital load stood at 109,378 on October 31, compared with 108,261 on September 30. Continuing increases, small but steady, are anticipated. Nearly 90 per cent of the patients are in Veterans Hospitals, the remainder in private and other federal institutions. At the end of October, 19,717 were awaiting admission, only fifty of which were for disabilities adjudicated as service-connected.—Washington Report on Medical Sciences, December 5, 1949.

INDUSTRIAL HEALTH CONFERENCE

Max R. Burnell, M.D., and J. L. Zemens, M.D., both of Detroit, representing, respectively, the Michigan State Medical Society and the Michigan Association of Industrial Physicians and Surgeons, are working on arrangements and program for the Industrial Health Conference scheduled for March 29, 1950, in Ann Arbor.

Other agencies co-sponsoring the industrial health day are the School of Public Health of the University of Michigan, the Medical School of the University of Michigan, Wayne University College of Medicine, and the Michigan State Department of Health.

M. R. Burnell, M.D.



J. L. Zemens, M.D.

Dr. Burnell, Chairman of the MSMS Industrial Health Committee and Dr. Zemens, President of the Michigan Association of Industrial Physicians and Surgeons, presented plans for the industrial health day at a meeting in Detroit on November 30. A tentative program featuring nationally known lecturers in the field of industrial medicine and surgery—and including audience participation—was agreed upon.

The joint statement of Drs. Burnell and Zemens follows:

"The Industrial Health Conference of March 29, will offer a continuation course in this specialty that will interest not alone surgeons and medical men in industry but all medical practitioners in the State of Michigan, in neighboring states, and in the Province of Ontario. The program is designed to be of especial value to the doctor of medicine who does not profess to limit his practice to industrial medicine and surgery but whose practice demands a knowledge of modern industrial medicine and surgery.

"Every member of the Michigan State Medical Society will be invited to attend the Industrial Health Day in March; those who take advantage of this opportunity will gain much of useful value in their everyday practice."

President Whittaker to Be Honored

The scientific program will be followed by a prepandial hour and a dinner arranged in honor of the President of the American Association of In-

(Continued on Page 14)

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INDUSTRIAL HEALTH CONFERENCE

(Continued from Page 12)

dustrial Physicians and Surgeons, Alfred H. Whittaker, M.D., Detroit.

The program of March 29 will be mailed to every member of the Michigan State Medical Society in February.

SOCIALIST ENGLAND

One may not buy a penny's worth of candy without a sweets coupon from a ration book. Meat, fats, sugar, coal, and chicken feed are all rationed. The commonest things are unobtainable. Britain is a land of slot machines without chocolate, bread without butter, public lavatories without soap, tables without napkins, homes without central heating, and meals without meat. It is a land where the average householder has one good dinner a week—on Sunday when the family, pooling coupons, gets its joint. On Monday leftovers are consumed. The next five dinners ring the changes on fish, "offal" (liver, kidneys, tripe), and sausage. Those who can afford it, eat out, but there's a hitch to that line of escape.

In 1946 the Socialist Government passed a law forbidding public eating places to serve a meal costing more than 5 shillings (70 cents). A dinner at that price is a sad affair. According to Socialist theory everyone is supposed to be equal.

Housewives must sign up with dealers for milk, meats, fats, cheese, bacon, and sugar. A woman cannot shop around or go to another store if she does not like what she finds in one store. She is compelled to file the names of her food dealers with the Government. One's destiny is thus tied to particular dealers. This has advantages. Your dealer looks after you, in a black market sort of way. For instance, suppose your family's coupons would entitle you to a 4-lb. joint on Saturday. If the coast is clear and there are no government spies around, the butcher may cut off a 6-lb. roast. He gives you the high sign. "It's 6-lbs.," he whispers. You say: "Fine!" He looks around. "Here, take it quick and get out!" he warns.—Marjorie Sharon's Report of a trip to Socialist England, December 15, 1949.

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of November 17, 1949

- Monthly financial reports, including statements on the Public Education Account and the Public Education Reserve Account, were presented, studied, and approved.
- State Health Commissioner A. E. Heustis, M.D., reported on the need for increased financial aid to local health departments and advised that a duplicate of S.B.134, as introduced into the 1949 Michigan Legislature, would be re-introduced in next year's Legislature; that one local health department (Cass County) had been lost during the past year and that Berrien, Jackson and Marquette Counties do not have local health departments. The matter was referred to the Councilors in the Districts concerned.
- Committee reports were presented by the Mental Hygiene Committee (two meetings); Committee on Scientific Work; Committee on Rural Medical Care; Advisory Committee on Rural Health Survey; Maternal Health Committee; Rheumatic Fever Control Committee; Cancer Control Committee; Public Relations Committee; and the Special Committee on Education.
- Drs. A. D. Allen, Bay City, and John R. Rodger, Bellaire, members of the Advisory Committee to the Michigan Office of Hospital Survey and Construction, gave a progress report of activities in Michigan under the Hill-Burton Act; the goal of this legislation is to have 4½ beds per thousand population in each district. The Michigan Health Plan for Hospital Survey and Construction, after full study, was referred back to the Rural Medical Care Committee for re-study and further recommendation.
- The very successful Third Annual Michigan Rural Health Conference, held October 28-29, 1949, in Grand Rapids, was reported by R. J. Hubbell, M.D., of Kalamazoo, Chairman of the MSMS Rural Health Committee, who also gave a résumé on the five resolutions passed at the Conference. A letter of

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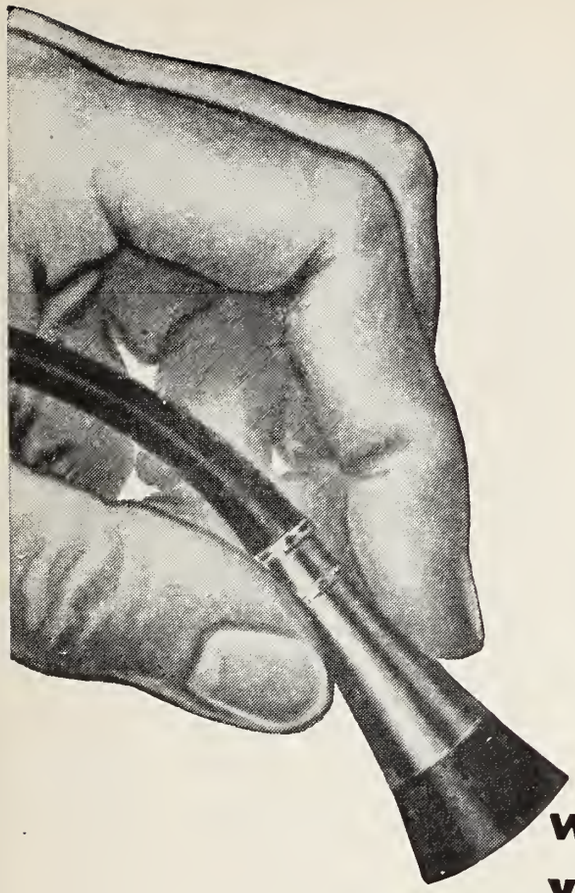

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HIGHLIGHTS OF THE EXECUTIVE COMMITTEE

(Continued from Page 14)

thanks was directed to be sent to the Michigan Foundation for Medical and Health Education, Inc., financial sponsor of the Conference, as well as to the Michigan Health Council for handling of all details of the meeting.

- President W. E. Barstow, M.D., reported that Dr. J. L. Christianson of the University of Minnesota had accepted his invitation to deliver the Biddle Lecture at the MSMS Annual Session, on September 20, 1950, in Detroit.
- The President-Elect, C. E. Umphrey, M.D., Detroit, recommended that formal thanks be sent to the *Detroit Times* and to writer Jack Pickering for the editorial of October 10, 1949, entitled "Sneaky Washington Effort To Bulldoze Michigan Doctors." This was approved by the Executive Committee of The Council.
- Chairmen of Rheumatic Fever Control Centers, as appointed by local county medical societies, were reported as follows: Harold Kessler, M.D., Alpena County; L. Fernald Foster, M.D., Bay County; Frank Van Schoick, M.D., Jackson County; H. S. Heersma, M.D., Kalamazoo County; Jerome E. Webber, M.D., Kent County; Norman E. Clarke, M.D., Wayne County; DeVere R. Boyd, M.D., Muskegon County; David P. Gage, M.D., Saginaw County; Donald S. Smith, M.D., Oakland County.
- The Michigan Chapter, Arthritis and Rheumatism Foundation, granted $4,500 and the Michigan Society for Crippled Children and Adults, Inc., granted $6,000 to the Michigan Rheumatic Fever Control Program of the Michigan State Medical Society, as reported by Secretary L. Fernald Foster, M.D.
- The monthly report of the Medical Co-ordinator of the Rheumatic Fever Control Program was read and approved.
- Program of the annual County Secretaries-Public Relations Conference to be held at the Book-Cadillac Hotel, Detroit, on Sunday, January 22, 1950, was presented by the Secretary and approved.
- R. J. Hubbell, M.D., Kalamazoo, was appointed as MSMS representative to the American Medical Association's Rural Health Conference to be held in Kansas City, February, 1950.
- Carleton Dean, M.D., Lansing, was appointed to represent the Michigan State Medical Society on the Advisory Committee of the Michigan Department of Public Instruction re qualifications for local persons in diagnostic service for mentally handicapped children.
- Proposed letter to be sent by the MSMS Cancer Control Committee to the chairmen of each cancer control committee in the State of Michigan (on the county or city level) was read and approved by the Executive Committee of The Council.
- The monthly reports of the President, President-Elect, Editor, and General Counsel were approved.
- Public Relations Counsel H. W. Brenneman reported that the organization of legal counsels of various state medical societies, instigated by the Michigan State Medical Society, had been carried out by the American Medical Association; the first meeting of these legal counsels will be held in Washington, D. C., during the AMA Interim Session.
- The holding of periodic conferences with the press by MSMS Officers or their designated alternates was authorized by the Executive Committee of The Council.
- A proposed program concerning "sex deviates" was presented to and discussed by the Executive Committee of The Council which referred it to a special committee, to be appointed by the Council Chairman, representative of the MSMS Mental Hygiene Committee, of the Legislative Committee, with Mr. Brenneman to serve as public relations advisor.

RESIDENCY TRAINING REQUIREMENTS

The American Board of Obstetrics and Gynecology has not made nor is it contemplating any changes in its residency training requirements, despite rumors of an increase in training years. Eligibility requirements remain the same, namely, three years of acceptable formal training, followed by at least two years of post-training practice in the specialty.

Hospitals are inspected and approved for training jointly by the Council on Medical Education and Hospitals of the American Medical Association and this Board. Approvals are granted for training periods of one, two and three years depending on the available facilities and the findings of the survey inspections.

This Board has no objection to residency services being arranged by hospitals for periods longer than three years, unless this dilutes the candidates's clinical training opportunities too much during the first three years. However, the Board does not accept a fourth year, or

(Continued on Page 18)

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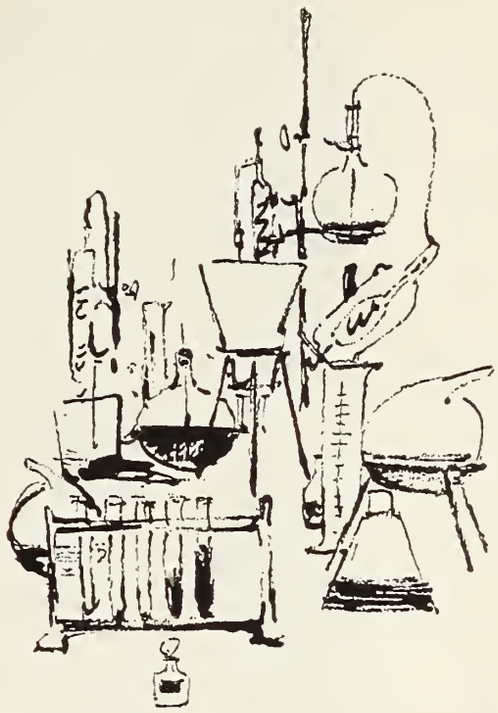

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RESIDENCY TRAINING REQUIREMENTS

(Continued from Page 16)

more, of residency training as a substitute for any part of the required two years of post-training practice.

The importance of post-training practice in the specialty is emphasized as an opportunity for maturing of the candidate and for colleague appraisal of a man's ability when working on his own responsibility in his chosen community. The only exception to this ruling is in the case of men advancing from their training into full-time teaching positions. These men then must complete at least two years in such positions.

Copies of the Bulletin of this Board, outlining the above requirements in more detail, are available to hospital administrators or to candidates, upon application.

PAUL TITUS, M.D., *Secretary,*
American Board of Obstetrics and Gynecology
1015 Highland Building,
Pittsburgh 6, Pennsylvania.

RESEARCH FELLOWSHIPS

Ten research fellowships will be awarded for one calendar year in the fields of medicine, dentistry, and pharmacy by the University of Illinois Graduate College in Chicago.

The fellowships carry stipends of $1,800 per year for medical and dental graduates and $1,200 for pharmacy graduates, with exemption from tuition fees for all appointees. In unusal cases, a $2,400 stipend may be awarded to those holding a Doctor's degree. Registration in the Graduate College for full time credit toward M.S. or Ph.D. degrees is required.

Fellowships provide opportunity for research training either in the basic medical sciences or in the application of these sciences to clinical investigation. They are primarily for graduates who are in the early stages of their preparation for a teaching and research career in medical and dental problems, although time credit toward specialty board requirements in basic sciences is recognized.

Fellows may be reappointed in competition with new applicants.

Candidates for fellowships must have completed a minimum training in any one of the following ways or the equivalent thereof:

1. Bachelor's and M.D. degrees.
2. Bachelor's and D.D.S. degrees.
3. Bachelor's degree in Pharmacy and M.S. degree.

Appointments will be announced March 1, for fellowships beginning July 1, or September 1, 1950.

Formal application blanks may be secured from the Assistant Dean, The Graduate College, University of Illinois, 808 South Wood Street, Chicago 12, Illinois.

TAXES

The following tabulation shows graphically the amount of tax paid to the Federal Government, the amount returned to the state, and the approximate percentage returned:

State	Tax Paid to Federal Government	Amount of Tax Returned to States	Percentage Returned
Alabama	$ 276,943,828	$133,399,689	48 %
Arkansas	121,751,193	96,959,563	79.5%
California	3,103,679,127	393,448,101	12 %
Colorado	291,848,648	77,986,957	27 %
Connecticut	664,939,280	57,223,656	8.5%
Georgia	439,033,999	133,655,573	30 %
Illinois	3,785,815,370	278,727,363	7.5%
Michigan	2,252,280,551	193,467,807	9 %
New York	7,975,513,716	432,941,740	5.5%
Ohio	2,665,707,099	236,982,646	9 %
Pennsylvania	3,222,789,298	359,300,954	11 %
Texas	1,285,123,045	352,855,457	27.5%

The grand total collected was over forty Billions of Dollars, and about five and a half billions were returned to the states. About 14 per cent came back to the states.

GOVERNMENT COSTS

The Bureau of Government Research has issued a report of government expenses covering the ten top states for 1948. These are the figures for cost per person. Michigan ranks second.

Nevada	$113.92	Arizona	$92.76
Michigan	108.47	Utah	89.45
New Mexico	105.11	Wyoming	83.47
Washington	101.45	Connecticut	82.17
Colorado	100.09	Florida	81.64

In 1946, Michigan ranked tenth, with a cost of $52.46; and in 1947 she was sixth, with a cost of $71.53.

The Michigan Heart Association offers speakers on heart disease topics as part of its educational program, during January, February, March, 1950, through the channels of the Department of Postgraduate Medicine of the University of Michigan. The following speakers and their subjects are available. Inquiries should be addressed to Leon DeVel, M.D., Secretary, Michigan Heart Association, 739 Plymouth N. E., Grand Rapids: Cameron Haight, M.D., or Herber E. Sloan, Jr., M.D., "Surgical Treatment of Congenital Heart Disease"; J. Marion Bryant, M.D., "Management of Cardiac Arrhythmias, "Congestive Cardiac Failure" "The Newer Digitalis Preparations," "Sodium Restrictions in Hypertension"; Franklin D. Johnston, M.D., "A Common Sense Approach to Cardiac Problems"; Paul S. Barker, M.D., "Some Aspects of Coronary Artery Disease"; Sibley W. Hoobler, M.D., "Hypertension," "Congestive Cardiac Failure," "Cardiac Catheterization," "Diagnosis of Congenital Heart Disease"; Earl Irvin, M.D., and John Bielawski, M.D., "Industrial Cardiology"; and Manes Hecht, M.D., and Leon DeVel, M.D., "Rheumatic Fever and Rheumatic Heart Disease."

* * *

The Academy of Forensic Sciences held its first meeting at Northwestern University School of Law, with headquarters at the Sheraton Hotel, Chicago, on January 26-27-28. LeMoyne Snyder, M.D., J.D., Lansing, was one of the organizers of the Academy.

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Skip the morning repast? Not Pete. If he snoozes until 8:02, he can still make the 8:24 by a flying leap—with a few minutes at the other end for gulped coffee and a cigarette. Scanty breakfast? He'll make it up at lunch—if he has time.

Pete doesn't think he's a meal-cheater. Neither does the food faddist, the worrier, the reducing "expert" nor any of their kin likewise committed to dietary sin. Thus do they become prey to all the associated evils of subclinical vitamin deficiency.

When you examine the habit patterns of these patients, it's obvious that overnight dietary reform won't come easy. So isn't it wise to make use of the aid provided by vitamin supplementation?

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Cancer Comment

CANCER CONTROL—A HALF CENTURY OF PROGRESS

It may be heartening and helpful to those interested in the cancer control program to look at the cancer pictures of 1900 and 1950.

In 1900, practically none of the present weapons used to fight cancer was in existence. Microscopes of moderate magnification were available for tissue examination. Surgery was the only recognized form of treatment but many body cavities were still closed to surgical exploration. Little or nothing was known of cancer causes or prevention. Such important laboratory procedures as tissue culture and selective animal breeding to produce constant biological types of tissues were still in the experimental stage.

Few cures were reported because practically all cancer patients were in advanced stages of the disease when first seen by a physician. Many fallacies regarding the nature, cause and treatment of the disease were widely believed. Fear of the disease was rampant and many shrank from hearing the word cancer spoken aloud.

Research efforts were devoted largely to isolation of an extrinsic causative agent, a bacterium or microscopic animal parasite. The intrinsic or biologic nature of the disease was not recognized beyond the theory of misplaced embryonic cells (the Cohnheim theory) which was widely hailed as a probable cause of all cancer.

Because there were few hopeful control measures to offer the cancer patient or the public, no attempt was made at public education. For similar reasons the subject was largely ignored in the education of medical and dental students. The condition was accepted professionally as something to be dealt with on an individual basis when encountered in medical practice.

Today, fifty years later, probably no disease holds a greater interest for the entire population than does cancer. Lay education has been extended to all groups of high school age and over. The subject has also reached the forefront of professional education. In both medical schools in Michigan, cancer is emphasized in undergraduate and postgraduate teaching and many research problems are under investigation. There is a lay cancer organization in every county in Michigan. Several hundred thousand dollars of government and private funds are spent annually in this state on cancer education, on service to the cancer patient and on research.

The public is urged to obtain periodic medical examinations by their own physicians to find cancer in early and curable stages and many are doing so. Attention to the early signs of cancer to avoid its development to the incurable stage is also being impressed on the public mind. The Hillsdale Plan for Tumor Detection is being accepted by an increasing number of medical societies in Michigan and throughout the country.

Diagnostic methods and facilities have been greatly improved. The electron microscope is revealing intimate details of cell structures and their probable place in metabolism. Biopsy permits examination of tissue without extensive surgical procedures. Studies of cells from body surfaces and fluids often will enable a diagnosis of cancer to be made before there is any microscopic evidence of the disease. The roentgen ray has proved invaluable as a diagnostic aid in many forms of cancer. The bronchoscope, gastroscope and similar instruments permit examination of most body cavities without resort to major surgery.

Radium and roentgen rays have been added to treatment facilities and hold a firm place along with surgery as recognized forms of cancer therapy. Hormones have proved valuable as palliative therapeutic agents in some sex-specific cancers of the opposite sex. Radioactive isotopes resulting from splitting of the atom are being intensively studied for their effect on cancerous tissue. They have not been proved to be curative and their use is still in the experimental stage.

Many causes of cancer are now known. Approximately 300 carcinogenic chemicals have been identified in recent years. Ill-fitting dental plates and the use of tobacco are closely associated with many mouth cancers. The carcinogenic action of ultra-violet light on skin tissues is well recognized.

Statistical studies have provided much valuable information regarding cancer. While records of

(Continued on Page 68)

PR In Practice

USE OF MEDIA—DISTRIBUTION OF LITERATURE

The success of a medical public relations program depends upon the practical application which is made of the various media of communication and expression available. In the initial article in the December issue, the use of visual displays was discussed and illustrated with photographs of actual displays prepared by members of MSMS. This month's article covers, the field of pamphlet publication and distribution as developed by the Michigan State Medical Society and presented by request to the annual meeting of the AMA last June.

Distribution of literature is of primary importance in our considerations. We have to ask ourselves such questions as: "Who is going to get the pamphlet?", "Why are you giving the pamphlet to them?," "What sort of action should the pamphlet bring?," "Where are the persons to whom you plan to give the pamphlet?" and "How are you going to get the pamphlet to them?" When we have the answer to these questions, we have the information which leads into the active tangibles of preparation and publication.

Any literature has value only when it is read by the person whom the writer had in mind when original preparation was made. Large supplies of pamphlets and broadsides piled in storerooms of state and county medical societies are not only *not doing a job,* but they constitute a fire hazard. For this reason, then, it becomes incumbent upon those receiving literature to disseminate that material immediately upon its arrival. It is also advisable for medical societies to maintain an inventory of at least two weeks' supply of literature. In this way, requests for material can be met without unnecessary delay, and the public relations value of the program is further enhanced. In the case of county medical societies, the question isn't nearly so important due to the short distances between supplier and distributor.

On the state level, it was found that the services of a professional mailing organization would more than balance the additional expense involved in buying equipment, rental of space, and hiring of extra employes. By using this method, the State Society office has eliminated a storage problem and developed an efficient method of distribution.

For example: Doctors and friends of the profession throughout the state are periodically supplied with printed requisition forms listing the pamphlets and other items which are available for use in quantity. Each pamphlet is listed, described, and numbered. There is room for designation of quantities desired as well as for signature of the requesting party. When the completed form arrives in the MSMS office, it is checked for error and over-order and forwarded to the office of the commercial organization for filling. The mailing organization then fills the requisition and puts the ordered material into the mails or express the same day. Staff members of this organization record the amount of postage used, keep a perpetual inventory and make necessary reorders and reprintings of pamphlets which are in low supply. By utilization of this method, the actual details of making distribution of literature is held to a few moment's work each morning by a secretary in the State Society office.

Additionally, a small supply of available material is kept in the Public Relations office for filling of single requests where only a few copies are desired.

With the activities of an extensive educational campaign, it is obvious that considerable expense is involved in making distribution of campaign materials. To this end, an increased and effective activity on the part of local medical societies can do much to eliminate some of the expense. However, the State Society, with its paid personnel, is usually in a more advantageous position than the smaller local groups that function without benefit of paid employes.

The opportunities are limitless for distribution; *the key, however, lies in getting the pamphlets to the right person, in the right way, and at the low-*

est cost. For example: a pamphlet picked up in the doctor's waiting room is not as effective as a pamphlet handed the patient in the waiting room by a personable receptionist who says, "I know you are interested in the important problems facing the country today and will want to read this pamphlet." And even this is not as effective as for the doctor himself to use the same approach and *urge* the patient to *express himself* after he learns the right facts in the case. You will find, of course, that distribution to the layman depends essentially upon the interest of the doctor, and if that interest is sufficiently stimulated and sustained, the ways and means will be forthcoming on the local level in many intriguing and effective ways.

In distribution of literature, it is well to remember the part the Women's Auxiliary can play. Auxiliary members are in a good position to place pamphlets in beauty parlors and other places where women congregate, to contact club meetings and to enclose booklets in letters and correspondence.

There are many, many avenues of distribution for literature in addition to doctors' offices which can be conveniently and efficiently used. Drug stores will often use posters and supplement the display by wrapping pamphlets with all purchases. Public libraries and, particularly, school libraries, when properly approached, will put the materials into the hands of those who are interested. Mailing by interested groups is usually possible and constitutes an effective means for reaching particular groups. For example, the farm audience can be reached through Grange and Farm Bureau mailings. These organizations are pleased to cooperate, and the farmer, receiving material through his own group, is more likely to read and seriously consider the import of the pamphlets. Pharmaceutical groups, bar associations, insurance groups and many others are all willing to co-operate after contact is made by those spearheading a campaign.

Many business houses have distributed pamphlets in their pay envelopes, while churches have used them as subjects for study groups. Public meetings are also good outlets, especially when materials are left on each seat in the auditorium.

Further examples of methods of distribution should include the work of a prominent western Michigan doctor who took the opportunity of placing small pamphlets in the open windows of parked cars as he walked to his office.

Ingenuity plays an important part in effective distribution, and each area and locality will find that problems incident to the area will require separate treatment. In the manner of treating the problem lies the effectiveness of the campaign.

A word of caution must be voiced in the use of literature as a public relations medium. It is one of the most expensive of the media, but it appears to be the cheapest. It is one of the most effective mediums, if properly used—and is one of the dangerously overrated mediums, if improperly used. It is based upon participation by the consumer, and unless it results in immediate action its effect is lost, for the emotional impact is seldom of long duration.

Editorial Bouquets To—

In my first "orchid throwing" of the new year I'd like to thank every member of the Society and the Auxiliary for their exemplary efforts during the year past. Your hard work on the CAP Program has paid handsome dividends and your co-operation indicates that the 1950, the "Mid-Century" year will attract your attention and time to complete the job against a Welfare State . . . Thank you all . . . Now for individual workers . . . **A. F. Bliesmer, M.D., St. Joseph physician, is commended along with the members of his County Medical Society for the excellent public relations gained through the appearance November 7, of Ernest E. Irons, president of the American Medical Association . . . Dr. Irons spoke to the Economic Club of Southwestern Michigan, and his remarks were broadcast as well as generously reported in the local press of that area** . . . Horizontal activities of the Wayne County Auxiliary is moving into high gear under the Inter-Organizational Committee composed of Mrs. W. G. Maekersie, Mrs. Paul H. Lippold, Mrs. W. W. MacGregor, Mrs. S. W. Insley, Mrs. I. C. Berlien, and Mrs. M. D. MacQueen . . . **George E. Chittenden, M.D., Detroit, is commended for his most exhaustive study of all literature relating to the problem of socialization** . . . McClellan Conover, M.D., Flint, has prepared a mimeographed sheet for his office visitors in which they indicate a desire for further information or answers to questions . . . He re-

(Continued on Page 26)

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Editorial Bouquets

(Continued from Page 24)

ports an unusual interest through this approach . . . **Ronald E. Clark, M.D., Detroit, recently returned from a visit to England, is passing out English thrupences (equivalent to a shoe shine in this country)—He indicates that this is the amount the average English doctor receives per call** . . . S. W. Hartwell, M.D., Muskegon, observed that literature wasn't being picked up—decided to place some on each waiting room chair . . . a kindly old lady arrived early in the morning, did her good deed for the day by picking up each pamphlet and replaced them in a neat pile on the waiting room table—moral is, you can lead them, but you can't make them read . . . **Mrs. George Waldbott, Detroit, made brilliant defense of voluntary medicine through columns of the Vassar College Alumni magazine . . . Her article has been cited by the AMA and reprinted in several medical journals** . . . The utilization of the film "Lucky Junior" is aiding the effectiveness of rural and urban club meetings addressed by Leo F. Chess, M.D., Reed City physician . . . **The members of the Muskegon Chamber of Commerce recently received copies of The U. S. Chamber's effective pamphlet "You and Socialized Medicine"** . . . Also Muskegon: More than 100 representatives of civic organizations in this area were entertained at a dinner meeting by the Muskegon County Medical Society recently. This is one of the meetings planned by this active Society to widen activity against government paternalism . . . **S. A. Fiegel, M.D., energetic Sturgis doctor, is spreading his talents beyond Michigan as he makes junkets into Indiana, spreading the cause of good government and voluntary medicine** . . . Words of praise are also due the Councilors and District CAP leaders for their note-worthy handling of the various district meetings held throughout the past several weeks . . . as a result of these get-togethers the horizontal program will gain added momentum through active Speakers Bureaus . . . **Credit J. E. Manning, M.D., Saginaw, with capable assists for the program as he speaks in and around his city** . . . Recent trip by PR Field Secretary reveals that everything freezes in the Upper Peninsula but the CAP activities as witnessed by the enthusiastic District meetings . . . **State Auxiliary President, Mrs. Don. R. Wright, and organizational chairman, Mrs. Oscar Stryker, also stepped up Auxiliary and CAP program in the UP as result of a junket through the area** . . . In closing don't forget the County Secretaries-Public Relations Conference on January 22 . . . plans for the future will be presented as well as several outstanding national personalities from the nation's capital. . . .

L. W. Hull, M.D., *Chairman,*
Special Committee on Education

From the P.R. Mailbag:

"This (It's No Bargain) is the best publication we have had yet . . . we congratulate the Woman's Auxiliary to the Michigan State Medical Society for the very fine publication. More power to them."

Mrs. John Z. Brown, *President*
Auxiliary to the Utah State Medical Society

"Please accept our congratulations on your pamphlet "It's No Bargain." It certainly should be most effective."

H. T. Caraway, M.D., *Secretary*
Montana State Medical Association

"Your new pamphlet "It's No Bargain" is certainly a most excellent approach to the campaign issue. . . . We are interested in knowing reprint prices and privileges."

James G. Burch,
Connecticut State Medical Society

BROOKINGS INSTITUTE PRESIDENT WARNS OF SECURITY PLANS

Dr. Harold G. Moulton, president of the Brookings Institution, believes the American economy is not strong enough now to carry "the cumulative burden of the social over-head."

In an address to 2,500 delegates to the 54th Congress of American Industry, sponsored by the National Association of Manufacturers, Dr. Moulton stated:

"If the current trends are not checked, the mounting tax load and the continuance * * * of fiscal uncertainty will * * * undermine private enterprise by killing the incentives to take the risks essential to a dynamic, expanding economy."

In only two years out of the last twenty has the Federal Treasury had a surplus of revenues over expenditures, Moulton pointed out. He stated:

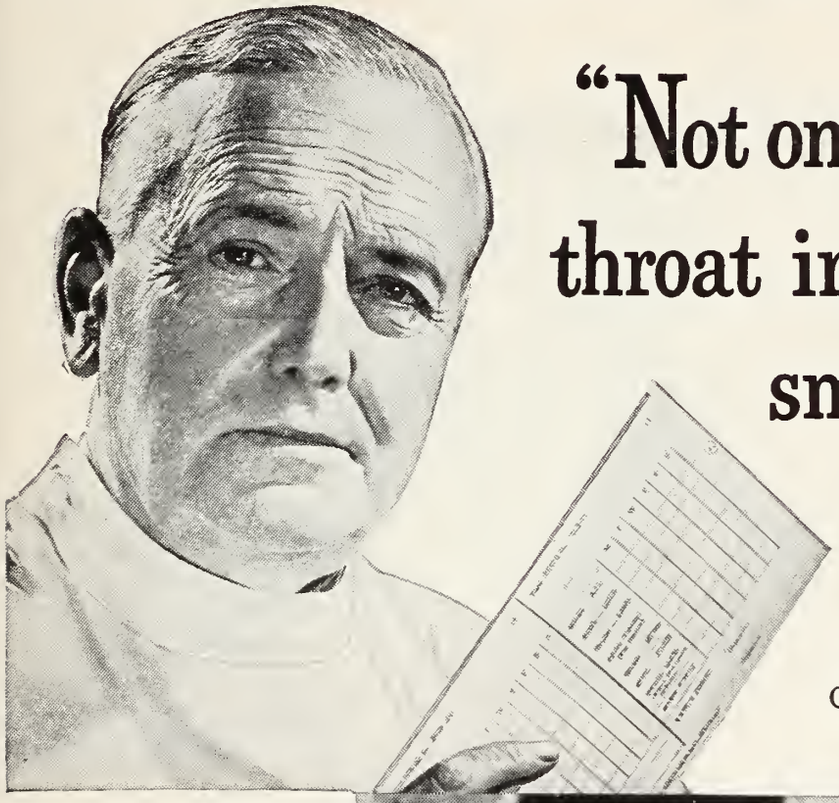
"The resulting vast rise in the public debt, expansion of social services and of military outlays have diverted an ever-increasing proportion of the national income to the Treasury in the form of taxes.

"Even a moderate recession, such as a 20 per cent decline, would involve a drop in tax receipts of something like 16 to 18 billions of dollars. We possess no margin of safety."

The Administration is seeking an expanded security program which, with veterans' benefits, may cost by 1960 somewhere between 20 and 28 billions of dollars annually, and as much as $36,000,000,000 by 1980, the economist estimated.

"What we are attempting is to decide now what burdens our children and grandchildren shall assume in connection with these spectacular programs," he told the National Association of Manufacturers.

Throat Specialists report on 30-day test of Camel smokers:



"Not one single case of throat irritation due to smoking Camels!"

Yes, these were the findings of throat specialists after a total of 2,470 weekly examinations of the throats of hundreds of men and women who smoked Camels—and only Camels—for 30 consecutive days.

R. J. Reynolds Tobacco Co., Winston-Salem, N. C.

Long Island housewife Edna Wright, one of the hundreds of people from coast to coast who made the 30-day Camel mildness test under the observation of throat specialists.

According to a Nationwide survey:

More Doctors Smoke Camels

than any other cigarette

Yes, doctors smoke for pleasure, too! In a nationwide survey, three independent research organizations asked 113,597 doctors what cigarette they smoked. The brand named most was Camel!

H. R. 6000 (Extension of Social Security)

On October 5, 1949, the United States House of Representatives passed H. R. 6000 by a majority of 333 to 14.

This is history now—but in that history it would be well to analyze carefully the implications in this seeming victory for the Administration. The bill, one of the most far reaching and dangerous extensions of social security ever to be presented, will be before the Senate in January, 1950. When it makes its appearance in its recognized role as a "political football" it will be up to the thinking people of America to protest long and loudly to their friends in the U. S. Senate.

The following report is designed to help you in taking action. In it you will find reasons why the proponents favor H.R. 6000 and in rebuttal, the views of the minority members of the House Ways and Means Committee.

The facts are here—The use you make of them and the subsequent action you and your friends take will determine the future of a great America which today, *is already too far down the road to a Welfare State.*

WHAT YOU CAN DO NEXT

In the days that lie ahead it will be your responsibility to see that your two Michigan Senators and those from other states are informed by letters and telegrams requesting *ONLY ONE THING—TO OPPOSE H.R. 6000.* Use one or more of the following reasons for asking its defeat:

1. This extension of Social Security, as planned, is not financially sound. Only a complete change in its concept and administration would make it so.

2. Compulsion is to be applied to 11,000,000 new persons who have never tasted Federal compulsion. This includes most self-employed persons.

3. If nearly all the working population is brought under Social Security there is every reason to fear that groups now exempted, farmers, lawyers, physicians, etc., would not long be free.

4. The new taxes proposed will inevitably be passed along to the consumer through higher prices.

5. The Government has not held Social Security taxes inviolate and cannot be expected to do so in the future.

6. Future committments made in H.R. 6000 are so great as to cause the insolvency of the United States.

7. The expensive wage records systems of the Social Security system should be abolished.

8. The Federal Government would be authorized to make direct payments to doctors of medicine thereby passing a hurdle on the road to socialized medicine.

9. In addition to writing Michigan's Senators A. H. Vandenberg and H. Ferguson, it would be well to contact the members of the Senate Finance Committee where H.R. 6000 will first be considered. The members are: Democrats—Walter F. George, Ga., Thomas Connolly, Texas, Harry F. Byrd, Va., Edwin C. Johnson, Cal., Scott W. Lucas, Ill., Clyde Hoey, N. C., Republicans—Eugene V. Milliken, Colorado, Robert A. Taft, Ohio, Hugh Butler, Nebraska, Owen Brewster, Maine, Edwin Norton, Pa.

Any member of the Michigan State Medical Society who desires further explanatory information and H.R. 6000 may receive a copy of the pros and cons by writing the Executive Offices, 2020 Olds Tower, Lansing 8.

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Maybe your situation parallels Dr. Jones' . . . or maybe it's altogether different. In any case, you can depend on the local Picker representative for unbiased advice, because the Picker line is a full line, embracing apparatus in *every* range, for *every* purpose.

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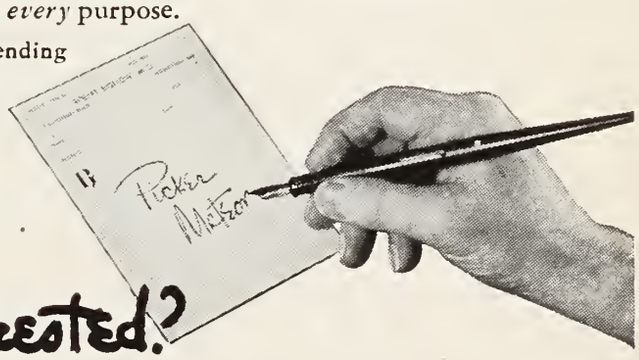

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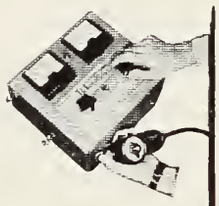

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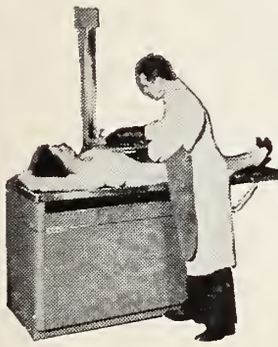

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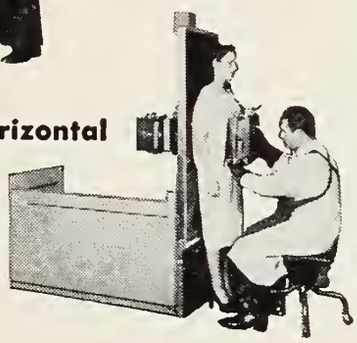

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Michigan Health Council Elects J. S. DeTar, President

Michigan's progressive health program took another step forward at the Annual Meeting of the Michigan Health Council, held at the Detroit-Leland Hotel, Detroit, on November 30.

Fifteen state level health organizations pledged support to the expanded activities' program of the

J. S. DeTar, M.D.

Council which has as one of its major projects the organization of Community Health Councils throughout the state, designed to study, analyze and promote local health projects through group planning in the community.

Retiring President A. S. Brunk, M.D., Detroit, pointed out that eleven Michigan community organizations have accepted Associate Membership in the Michigan Health Council, and that organizational activities are underway in seven other counties in various parts of the state.

The Council, which was originally set up and supported by M.S.M.S., Michigan Hospital Service, Michigan Medical Service and Michigan Hospital Association, still has the backing of these groups. An amendment written into the By-Laws in November, 1948, provided opportunity for other Michigan organizations having a major interest in health to become voting and contributing members.

Dr. Brunk reviewed the progress of the Council since it was launched on its expanded program last February, He explained that 11 Michigan organizations interested in health on a state-wide level have accepted invitations to membership in the Council, and that seven other such health groups are planning to become affiliated with the Council.

Listed among Michigan organizations which have taken membership this year are: American Cancer Society, Michigan Division, W. K. Kellogg Foundation, Michigan Education Association, Michigan Agricultural Conference, Michigan Farm Bureau, Michigan Foundation for Medical and Health Education, Inc., Michigan State Grange, Michigan Health Officers Association, Michigan Home Economics Association, Michigan Public Health Association, Michigan Rural Teachers Association, Michigan Tuberculosis Association.

Dr. DeTar Honored

In accepting a unanimous vote for president, J. S. DeTar, M.D., Milan, encouraged continued support of the Council's program by the present membership and promised further expansion of the Council's activities in 1950. Dr. DeTar explained that "good health begins in and belongs to the community, and we must do everything possible to assist each and every Michigan community to build its own health program." He explained that "the Michigan Health Council stands ready to co-operate with any Michigan community in the formation of a local health council, free of charge," and encouraged local groups to take advantage of this service which is available to them.

Graham Davis of Battle Creek, H. W. Brenneman of Lansing and L. Gordon Goodrich of Detroit, were re-elected as Vice President, Secretary and Treasurer, respectively.

Re-elected to the Board of Trustees were: Graham Davis, Battle Creek, William S. McNary, Detroit, R. L. Novy, M.D., Detroit, A. S. Brunk, M.D., Detroit, L. Gordon Goodrich, Detroit, O. K. Engelke, M.D., Ann Arbor, and David Littlejohn, M.D., Dearborn. Others elected to serve on the expanded Board of Trustees were Kenneth Babcock, M.D., Detroit, E. I. Carr, M.D., Lansing, B. D. Dann, Muskegon, J. S. DeTar, M.D., Milan, Mrs. Marjorie Karker, Lansing, and G. C. Stucky, M.D., Charlotte.

The Annual Report presented to the membership by E. H. Wiard, Executive Secretary of the Council, reviewed ten major projects which have been accomplished this year and proposed seven new projects for consideration. President DeTar was authorized to appoint a committee on projects to study and recommend action to be taken on the proposals.

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Crystalline Vitamin B_{12}.....15 micrograms

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May be administered subcutaneously or by intramuscular injection.

Dose: 10 to 30 micrograms twice weekly until remission occurs. Maintenance dose, 5 micrograms per week.

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Address .....City .....

HEALTH NEEDS AND HEALTH CARE IN MICHIGAN

Abstract

By Charles R. Hoffer, Duane L. Gibson,
Charles P. Loomis, Paul A. Miller,
Edgar Schuler and John F. Thaden,
Social Research Service, Michigan State College
East Lansing, Michigan

THIS STUDY presents the results of a state-wide survey of a sample of 1,113 households scientifically selected from the rural and urban areas of the state. By use of a selected and tested list of twenty-seven symptoms the study showed that more medical care is needed throughout the population. The amount of unmet need for medical attention, however, is greatest in the open country. Among the factors associated with an increase of unmet medical need were: low income; lack of education, especially for families in which the education of the female head is eighth grade or below; size of medical service area, if under 2,000 in population; miles to the nearest town when the distance exceeds ten miles.

The families reported that 43 per cent of the individuals who had one or more untreated symptoms ought to see a doctor. When asked why such persons had not seen a doctor the following reasons, listed in order of frequency, were: too expensive; lack of time; symptom not thought to be serious; neglect; belief that doctor is unable to help condition; and then a list of "other" or miscellaneous reasons.

The data of the study showed that slightly more than two-thirds of the families go to one doctor only for most of their ills. About one family in each six goes to more than one doctor, and approximately one family in each seven reported that they had not established contact with any doctor.

The section of the study dealing with practices and opinions regarding health services showed that the qualities of a doctor that people like most are pleasing personality and ability to diagnose and treat illness. They dislike most of all ineffective treatment and what they judge to be poor techniques in administering treatment. About four-fifths of the families succeeded in getting a doctor's help when they needed it. When a family could not get a doctor, the failure was due in about four times out of ten to one of the following reasons: either the doctor was not on duty (afternoon off, Sunday, or holiday); or the doctor was too busy. In general, people believe that more doctors are needed in Michigan communities; but about seven persons out of every ten do not know how a community could endeavor to get a doctor if it needed one. Among almost one-half of the families interviewed, one or more family members had gone to a doctor who was not an M.D., usually an osteopath.

About 34 per cent of all families in the sample had insurance to pay for a part or all of hospital expenses for at least one member of the family. For fees for surgery, the corresponding percentage was twenty-nine. For a part or all of doctors' services other than surgery only 12.6 per cent of the families had such coverage for at least one family member. An illustration for such coverage would be the medical service that a man might receive at the place where he works.

A high percentage of the families thought insurance or prepayment plans for paying hospital or doctor bills are a good idea. Only about one informant in each five, however, had heard of any kind of a government sponsored prepayment plan for paying doctor and hospital bills. Yet, when asked if they thought a government plan to pay for doctor and hospital bills was a good idea or not, 45.9 per cent thought it was a good idea and 17.9 per cent were uncertain.

In the part of the study dealing with community and public health matters the data showed that programs to have children immunized or vaccinated for diptheria, smallpox and whooping cough are needed. About one person in each ten was concerned about a specific health problem in his local community. Most of the problems mentioned pertained to some aspect of sanitation, although 2 per cent of the informants mentioned lack of doctors as a major community health problem. Only about one person in each five stated that he had heard about community health councils, but a majority of the informants thought a community health council or similar organization would be a good idea.

A total of 41.4 per cent of the 717 informants reported that they had not heard or read about the Michigan State Medical Society. Among the 376 who said they had heard about it, 53.2 per cent thought it worked for the interest of both the people and the doctors. Forty-one per cent of the 376 informants said they liked what the Michigan State Medical Society does. Half of the number were not sure whether they liked its activities or not.

Summary (Part I)

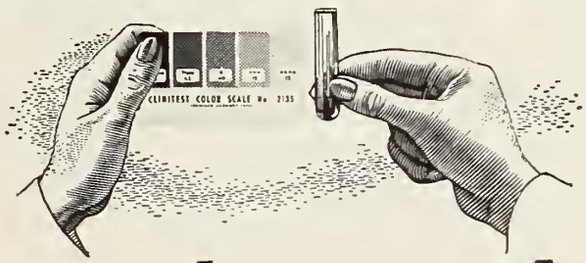
Briefly stated, the findings of the survey regarding unmet need for medical attention show that more medical care is needed throughout the population. The amount of unmet need, however, is greatest in the open country and in villages. Metropolitan areas correspond very closely to open country areas in regard to the proportion of the population having unmet need for medical care. All of the twenty-seven symptoms used in the schedule were reported one or more times. Those which tended to occur most frequently in all sample areas were pains in the joints, toothache, poor vision and

(Continued on Page 36)

This is a report of a state-wide survey to the Michigan State Medical Society and Michigan Foundation for Medical and Health Education Inc. by Social Research Service, Michigan State College, East Lansing, September, 1949.

Detection must be early

Early vigorous treatment of diabetes increases the patient's chances for longevity. One million diabetics remain undetected in the United States.* The diabetic must be detected before it is "*too late.*" ***Selftester***—for the general public, is a simple home test for the detection of urine-sugar. Its purpose is to help discover the hidden diabetic and bring him to the physician for adequate care.



Control must be complete

A well-controlled diabetic is less susceptible to infection and acidosis. The incidence of vascular complications, retinitis, gangrene, and renal intercapillary glomerulosclerosis is reduced with vigorous control. "*Too little*" is the symbol of inadequate control.

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*Joslin, E. P., Postgrad. Med.: 4:302 (Oct.) 1948.
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(Continued from Page 34)

unexplained tiredness. The occurence of symptoms showed a tendency to increase as the age of individuals increased.

Among the socio-economic factors associated with unmet need, gross family income was an important factor in all sample areas. Miles to the nearest town having a doctor, an ecological factor, was also associated with amount of unmet need. The unmet needs increased with distance. Population of the medical service area appeared to be associated with the lower levels of health and health care if the population was under 2,000. There was a tendency for the level of health and health care to go down as the education of years in school of the head of the family decreased.

The data show that slightly more than two-thirds of the families go to one doctor only for most of their ills. About one family in each six go to more than one doctor, and approximately one family in seven reported that they had not established contact with any doctor.

Eighty-eight per cent of the families reported that the doctor they usually consulted was an M.D. In the total sample 3.1 per cent of the doctors were non-M.D.s; but in villages the corresponding percentage was 4, and in urban areas, 3.9.

During the period of six months immediately preceding the date of the interview, it was ascertained that 65.9 per cent of the individuals had not consulted a doctor at all. Thirteen and three-tenths per cent of the individuals have consulted a doctor at his office one time. Among the remainder, 1.8 per cent have consulted a doctor twenty-one or more times. There were not marked differences among the open country, village, metropolitan and urban families regarding the number of times a doctor was consulted. Likewise, care of the patient in his home by a doctor occurred in all areas with a high degree of uniformity. About 7 per cent of the population had received such care during the six months' period.

Dental service was less general among the population than was medical care. Only 22.6 per cent of the population had received dental care in the period of six months, whereas 34.1 per cent of the population had received at least some medical care. About 14 per cent of the population had seen a dentist at least one time during the six months' period, and a total of 7.8 per cent of the population had received dental services more than one time.

The families reported that 43 per cent of the individuals who had one or more untreated symptoms ought to see a doctor. When asked why such persons had not seen a doctor, the following reasons, listed in order of frequency, were given: too expensive; too far, distance too great; lack of time; symptoms not thought to be serious; neglect; belief that doctor was unable to help condition; and then a list of "other," or miscellaneous reasons.

Among those persons who consulted a doctor the data show that 17.5 per cent, more than one in each six, were advised to go to a hospital; and 14.6 per cent actually went. A slightly higher proportion of the rural population than of the urban population were hospitalized.

Summary (Part II)

The outstanding qualities that people like about a doctor are pleasing personality and professional efficiency. They dislike most of all poor, ineffective treatment and what they judge to be poor techniques in administering treatment. In general, however, the people expressed satisfaction with the help they had received from doctors. When they were dissatisfied, the most common complaint was poor treatment and bad techniques.

About four-fifths of the families succeeded in getting a doctor's help when they needed it. When they could not get a doctor, it was due in about four times out of ten to one of the following reasons: either the doctor was not on duty (afternoon off, Sunday, or holiday); or the doctor was too busy. In 13.9 per cent of the instances the fact that the doctor would not make house calls accounted for the failure to get his help. When the services of the doctor could not be obtained, the family usually called another doctor. The results of failure to get a doctor's help varied. In one-fourth of the instances another doctor treated the patient satisfactorily; but in 9.3 per cent of the cases the patient got worse; and in 6 per cent of the instances the patient died.

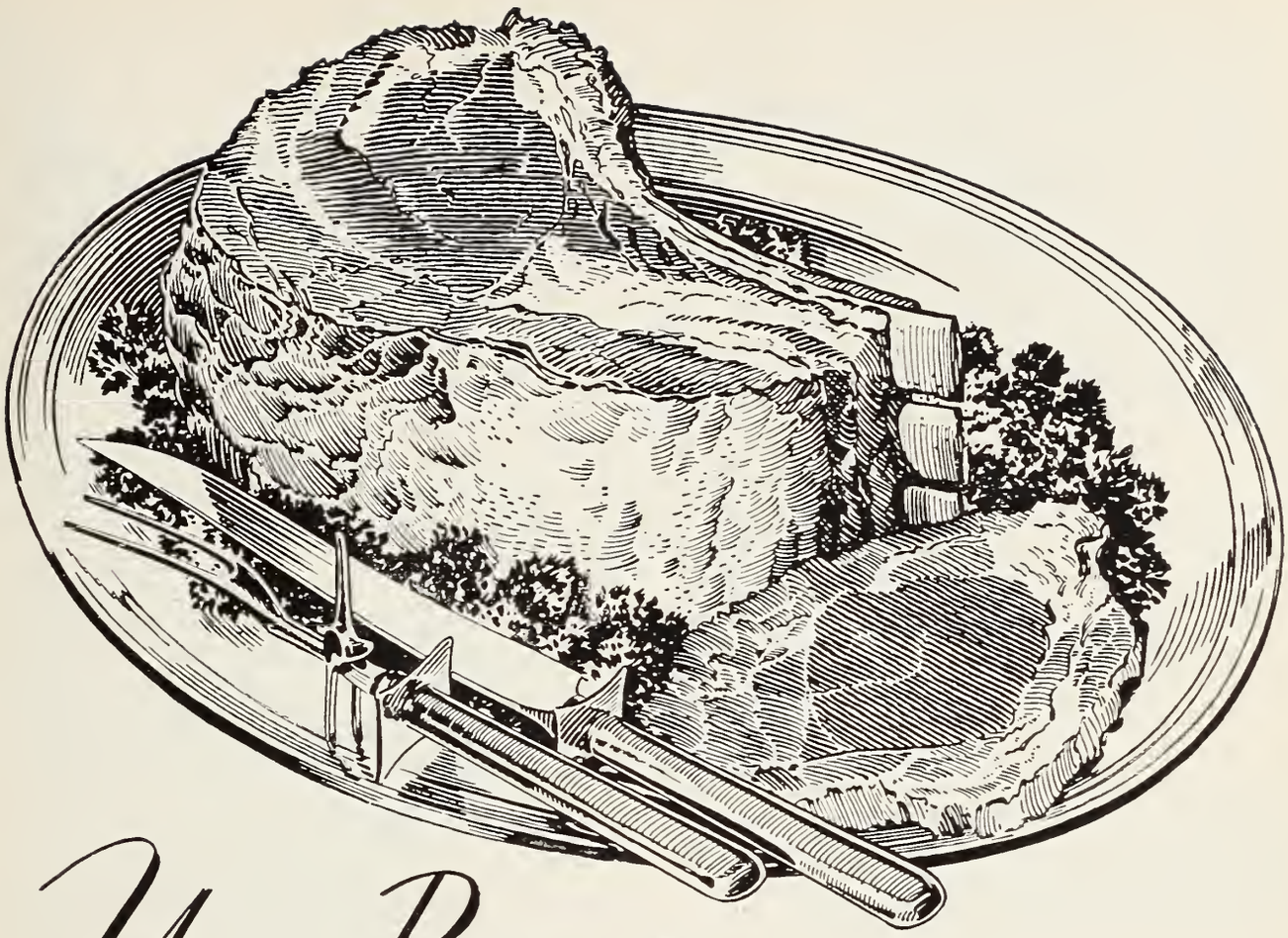
In general, people believed more doctors are needed in Michigan communities; but about seven persons out of every ten do not know how a community could endeavor to get a doctor if it needed one. Only about one-third of the residents in Michigan have heard about group practice on the part of doctors; but 46 per cent believe they prefer a group plan rather than going to a doctor who practices alone.

Among the families interviewed, in almost one-half of the total, one or more members had gone to a doctor who was not an M.D. More often than not the doctor who was the non-M.D. was an osteopath. In about three times out of ten, the non-M.D. which the family went to was a chiropractor. The most frequent ailment which the patient had when he went to an osteopath was "back trouble." General ailments ranked second in the list of causes. Opinions about the training of M.D.s and osteopaths varied, but 46 per cent of the informants stated that they did not know what the difference was.

The survey showed that one or more members of 63 per cent of the families had been hospitalized within the last year or two. In most instances, the families were satisfied with the services they received from the doctors while in the hospital. About 30 per cent, however, were dissatisfied with the accommodations and services that they received. The dissatisfaction pertained to lack of nurses, high rates and poor food.

About 60 per cent of the families had had insurance to pay for a part or all of the hospital bills for at least one family member, although in a majority of cases all eligible members of the family were included in the plan.

(Continued on Page 38)



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*McLester, J. S.: Protein Comes Into Its Own, J.A.M.A. *139*:897 (April 2) 1949.

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(Continued from Page 36)

Approximately one-half of the families had insurance for at least one member to pay for a part or all of the fees for surgery; but only a fourth participated in prepayment plans to pay for any kind of doctor services other than surgery.

Blue Cross insurance accounted for 36.2 per cent of the hospital insurance, 35.4 per cent of the insurance for surgery, and 29.8 per cent of the insurance for doctors' fees. Of the 717 informants, a total of 299 (41.6 per cent) stated that one or more members of the family had carried hospital insurance and dropped it. The most frequent cause for dropping was "quit work at the place where person participated in the group plan." Among the 299 dropping insurance, 27.8 per cent were families who had Blue Cross insurance.

A high percentage of the families thought that insurance or prepayment plans for paying hospital and doctor bills are a good idea. Only about one informant in each five, however, had heard of any kind of a government-sponsored prepayment plan for paying doctor and hospital bills. Yet, when asked if they thought a government plan to pay for doctor and hospital bills was a good idea or not, 45.9 per cent thought it was a good idea and 17.9 per cent were uncertain. Only 28 per cent definitely stated that it was not a good idea. Questions in which the term "socialized medicine" was used showed that 67.9 per cent of the 717 informants had not heard about it; 25.2 per cent had heard about it, and the remainder were uncertain. Those who had heard about it thought that socialized medicine would be especially advantageous for families with low incomes. A certain number, about 6 per cent, thought more people would be taken care of. On the other hand, in the opinion of the informants, the chief disadvantage would be that it would add to government control. About one person in each eight mentioned that objection. About 7 per cent thought that under a plan of socialized medicine, the quality of medical care would be lowered.

Summary (Part III)

The survey showed that one or more members in one-fourth of the families had been personally advised or examined by a representative of their local health department. Proportionately more families in metropolitan areas had such contacts than the families in other areas. The percentage for those areas was 30.4. Immunization for diphtheria was reported for 63.4 per cent of the children six months to sixteen years of age. The lowest percentage for that item was found in urban areas, and the highest for open country residents. Immunization for whooping cough was less general because only 42.5 per cent of the persons six months to sixteen years of age were reported as immunized and had not had the disease; and an additional 7.8 per cent were reported as vaccinated and had the disease. Vaccination for smallpox was reported for 69.2 per cent of all individuals over one year of age included in the sample. The general conclusion to be made from these percentages is that the programs to have children vaccinated for the diseases under consideration should be intensified.

It appears that approximately one person in each ten is concerned about a specific health problem in his local community. Most of the problems pertain to some aspect of sanitation, although 2 per cent of the informants mentioned lack of doctors as a major community health problem. Only about one person in each five had heard about community health councils; but a majority of informants thought a community health council or similar organization would be a good idea.

Using the Michigan State Medical Society as an illustration of organizations working in the field of health, the 717 informants were asked if they had heard or read about it. A total of 41.4 per cent reported that they had not heard or read about it. Among the 376 persons hearing or reading about it, 53.2 per cent thought it worked for the interest of both the people and the doctors. A third of the total were uncertain, and 9.3 per cent definitely stated that they thought it worked for the interest of the doctors. However, 41 per cent of the 376 informants stated that they liked what the Michigan State Medical Society does. A half were not sure whether they liked its activities or not.

The radio program "Tell Me, Doctor" had been heard by one of the members in one-fourth of the households included in the survey, and about 40 per cent of the persons who had heard about it listened to it at least one time per week. Only 22.7 per cent of those informants knew that the program "Tell Me, Doctor" was sponsored by the Michigan State Medical Society.

A. S. Brunk, M.D., Detroit, Past President of the Michigan State Medical Society and Immediate Past President of the Michigan Council, was honored by the Health Council on the occasion of the MSMS Annual Secretaries-Public Relations Conference in Detroit on January 22. Dr. Brunk was presented with a testimonial plaque commemorating his long-time service as President and guiding spirit of the Michigan Health Council.

* * *

Alfred Heacock Whittaker, M.D., Detroit, President of the American Association of Industrial Physicians and Surgeons, will be honored by a testimonial dinner in Ann Arbor on March 29. This banquet, closing the first annual Michigan Industrial Health Conference, will be held at the Allenel Hotel. The Conference is sponsored by the Michigan Association of Industrial Physicians and Surgeons, the U. of M. School of Public Health, the U. of M. Medical School, Wayne University College of Medicine, Industrial Health Division of the Michigan Health Department, and the Industrial Health Committee of the Michigan State Medical Society.

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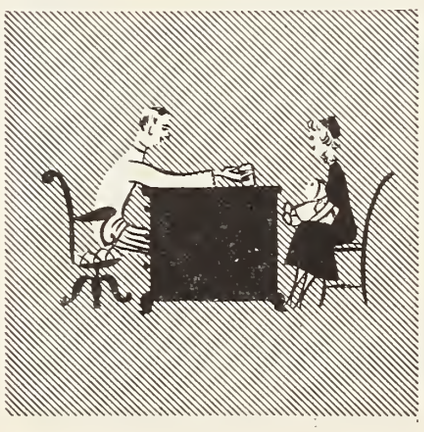

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Political Medicine

DRISCOLL COMMENTS ON SOCIALIZED MEDICINE

Charles B. Driscoll writes a column in the Daily Newspapers "New York Day by Day." In the installment for November 30, 1949, he writes:

"I believe that the people understand that compulsory federal health insurance means eventual socialized medicine, such as now exists in England, and it is my personal opinion that the people do not want that.

"Still, our government, without referendum, has placed us in a position that makes us easier to sell on socialized medicine than we were a year, two or 10 years ago.

"We are supporting, out of our taxes, the British socialized state. One of the heaviest expenses which we pay out of our pocketbooks is for socialized medicine in England.

"Doctors and dentists and eye-glasses are free, or almost free, in England, but we are paying those doctors and dentists and eyeglass makers handsomely out of our taxes. Doctors are making more money than they made in the evil old days of capitalism and honest competition."

This is another piece of misinformation given to the millions of readers who accept Driscoll's word as gospel. According to the *British Medical Journal,* and all information we are able to get the British doctor is not making much money, except some few specialists. Driscoll continues:

"Now, such new drugs as aureomycin, one of the so-called miracle drugs, are needed by many millions of persons suffering from certain specified ailments. A relative of mine recently took the aureomycin treatment, lasting two days. He paid $16 for having the doctor's prescription filled, besides paying the doctor $10 for prescribing it.

"In England, at that same minute, the same prescription was being filled at the price fixed by law, 14 cents. Prior to the recent "austerity" laws and devaluation of the pound, the English patient was getting the prescription filled free of charge."

"Few Americans can afford $16 for a dozen pills. So the American who needs medical and surgical care and drugs is apt to say, 'Well, we're spending our money to buy these things for the English, who mock us for our generosity; why not do as much for the Americans, who pay the bills?'

"There is some practical logic in that, but it doesn't mean that state medicine, creating a vast new bureaucracy, with all its votes going for lifetime jobs for the Washington politicians, is a good or desirable thing."

PROPOSAL TO CURB FREE MEDICAL AID

WASHINGTON, Nov. 18—(AP)—The budget bureau has proposed that the armed services stop providing free medical and cut-rate hospital care for families of service personnel living in this country.

Budget Director Frank Pace wrote Secretary of Defense Johnson that such services could be halted now in view of the $330,000,000-a-year pay raise recently granted to members of the armed forces.

That raise, he said, lifted military pay to "levels commensurate with pay" of federal civilian employes who do not receive such medical, dental and hospital care.

Would Ease Shortage

Pace also said that elimination of the services would cut military costs and help ease the shortage of doctors and dentists in the army, navy and Air Force.

His letter was merely a proposal, rather than an order. If the armed forces oppose it, the matter presumably would be turned over to President Truman for a decision.

Johnson was reported today to have referred Pace's letter to the defense department's personnel policy board for study. Some members of the board, in the past, have expressed belief that military morale would be hurt if the medical service to dependents is discontinued.

The Hoover commission last summer estimated that about 900,000 dependents of the army and Air Force alone are receiving or are eligible for substantially free medical care.

Move for Reduction

The commission suggested that congress say what beneficiaries should receive medical care as a move to reduce hospitalization costs. It described free medical care as actually a part of the pay and emoluments received by members of the armed forces and said this factor should be considered in any action by congress.

In addition to free attention by military doctors, dependents of service personnel can get hospitalization for about $1.75 a day. The armed forces estimate that it costs as high as $13 a day to operate a hospital room.

Under Pace's plan, the discontinuance of the services would affect only military dependents within the United States.

Even then, Pace told Johnson, there should be an exception for service families stationed in areas where private facilities are insufficient to provide the care.

However, in such cases, he proposed that military services charge the full cost they incur in providing the service.

He also specified that service should be provided "on a humanitarian basis in event of emergency."—*The Enquirer and News,* Battle Creek, November 18, 1949.

(Continued on Page 42)

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The uniformly high degree of patient acceptance of Koromex Jelly or where less lubrication is required Koromex Cream... and the genuine approbation of gynecologists support the fact that the jelly and the cream are not surpassed for effective, safe, and pleasant use where pregnancy is ill advised.

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MERLE L. YOUNGS • PRESIDENT

(Continued from Page 40)

FREE MEDICAL CARE MAY END FOR THOUSANDS

Several thousand dependents of service men residing in the Battle Creek area would be affected if Defense Secretary Johnson should follow the recent budget director's recommendation and discontinue providing medical and hospital services.

It has been the policy of the army medical service to provide care to dependents of service men whenever and wherever such care is available.

Percy Jones General hospital provides such services to the families of soldiers, sailors, marines and air force personnel residing in Battle Creek and vicinity, and also provides hospitalization at times for members of families living in nearby states.

No dental services are provided to dependents in this area, because of shortage of army dentists.

The Battle Creek area, with the reactivation of Fort Custer, will have one of the largest concentrations of military families in the midwest. It is estimated that nearly 3,000 dependents live in Battle Creek and vicinity.

Should they be cut off from care by army physicians, it undoubtedly would throw a tremendous burden on the civilian physicians.—*The Enquirer and News,* Battle Creek, November 18, 1949.

THE POLITICIAN'S PARADISE*

MR. FORD: Mr. Speaker, under leave to extend my remarks in the *Record,* I include the following poem by Mrs. R. Earle Smith:

THE POLITICIAN'S PARADISE

To socialize doctors, politicians would try—
A dictator's paradise, no one can deny.
Good honest medicine they would efface,
A political nostrum, instead to replace.

The totalitarian talk is only for the majority,
They think it's unimportant—to protect the minority;
If this trend of thought is not quickly curbed
All private enterprise will soon be disturbed.

The bureaucrats, socialism would spread,
Such a state of affairs is something to dread;
If their propaganda the public should heed—
To communism this eventually will lead.

We always look to our country with pride;
For our democracy, men have fought and died
Free enterprise is part of their contribution;
Any kind of dictatorship is against the Constitution.

The demagogues' talk is so full of deception—
What they mean, the public has no conception;
These bills they promote—greatly increase the tax,
To mention the truth, agitators are lax.

Thousands of employes will have to be hired,
To handle the red tape and taxes required.
The things they claim to the people are free
A national burden, ultimately will be.

Political medicine fails wherever it is tried;
The best medical care—patients are denied.
American medicine is the best in any land;
This truth the layman must understand.

If honest facts the proponents do not hide,
Each man for himself can then decide
And the black flag of absolutism will never wave
O'er the land of the free and the home of the brave.

MRS. R. EARLE SMITH.

*Extension of Remarks of Hon. Gerald R. Ford, Jr., of Michigan in the House of Representatives, Monday, April 11, 1949.

MR. AND MRS. PUBLIC

If the Socialized Medicine Bill should pass
  You will groan, sigh and say "Alas"
We did not give this bill attention
  It couldn't have passed with our intervention."
I'll relate to you what will happen right here—
  Your doctor, whom to you is dear,
From your family life will soon disappear.
  When you are sick you will realize
There will be no more private enterprise!
  To pay expenses when you are ill,
Your taxes increase to foot the bill.
  A slice of your pay each week will be taken—
You'll have much less when you bring home the bacon!

Now say to yourself "Which shall it be:
  Dictatorship, or my choice of doctors for me?"
We pay tribute to Uncle Sam,
  His name we will always shield;
If they change him to Uncle Sam, M.D.,
  He will surely be in the wrong field.
So—study this bill and a little time spend
  On deciding just what you should do;
When you learn the truth, against it contend
  Or the day that it's passed you will rue!

To your Senators and Representatives please drop a line
Requesting them, this bill to decline.

MRS. R. EARLE SMITH

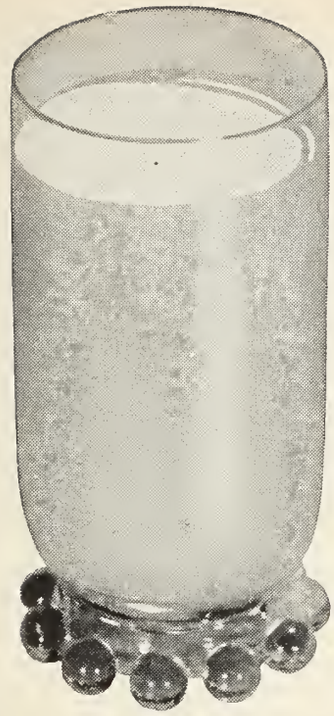
The Detroit Regional Committee on Trauma, American College of Surgeons, will hold a Symposium on Trauma on Wednesday, March 8, 1950, in the English Room of the Book-Cadillac Hotel, Detroit, from 3:00 to 5:00 p.m. All MSMS members are cordially invited to attend. Program will be published in the February number *JMSMS.*

* * *

R. S. Sykes, D.D.S., Muir, Michigan, is the sponsor of the annual Sykes Lecture, presented on the occasion of the Michigan Postgraduate Clinical Institute. The Sykes Lecture this year will be presented on Thursday, March 9, in the Grand Ballroom of the Book-Cadillac Hotel, Detroit. Plinn F. Morse, M.D., Detroit, the 1950 Lecturer, will speak on "Laboratory Methods for the Diagnosis of Malignancy."

* * *

Mount Carmel Mercy Hospital, Detroit, celebrated its Eleventh Annual Clinic Day on January 25. Speakers included Saul Rosenzweig, M.D., Detroit; Carl P. Huber, M.D., Indianapolis; N. Chandler Foot, M.D., New York; Richard B. Cattell, M.D., Boston; Thomas Francis, Jr., M.D., Ann Arbor; Hans Selye, M.D., Montreal; George Crile, M.D., Cleveland. The luncheon speaker was Preston Slosson, Professor of History, University of Michigan. The Clinic Day was followed by a dinner-dance at the Book-Cadillac Hotel with Bishop Charles Leo Nelligan of Windsor speaking on "The Past Half Century."



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These are some of the unique values of buttermilk in combatting certain intestinal derangements among infants and adults, in relieving constipation and alleviating stomach disorders. For buttermilk of uniformly high quality, made with pasteurized milk, may we suggest Sealtest Buttermilk?

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HYCODAN® BITARTRATE

Endo brand of dihydrocodeinone bitartrate

For selective cough therapy

3 FORMS: Oral tablets (5 mg.); syrup (5 mg. per teaspoonful); and powder (for compounding). Average adult dose 5 mg. May be habit forming; narcotic blank required. Literature sent on request.

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Editorial Comment

SENSE ON HEALTH

There's nothming more devastating to a theory than a few facts. The truth of this old saw is demonstrated anew by Columbia University's study of the hospitals of New York state, recently completed after fifteen months' investigation under a state grant of $60,000. The Columbia document collides head on with most of the assumptions underlying the recent agitation for "socialized medicine" or for national compulsory medical insurance. It proved that for at least one great state of 14.5 million (10 per cent of the U. S. population) American medical service is in pretty good shape.

The argument for a comprehensive federal subsidy of medicine makes much of the alleged fact that private, municipal and state-owned hospitals, squeezed by rising costs, cannot be locally supported cornerstones of an effective medical system. But the Columbia study suggests the precise opposite. Far from operating in the red, the New York hospital system, both public and private, is found to be in constantly improving financial condition—better, in fact, than at any time since 1940. The most pressing need for general hospitals disclosed by the survey is not for additional facilities but for improving the diagnostic services and for modernizing or replacing old buildings that are becoming obsolete. Additional state aid for care of mental and tuberculosis patients is also needed.

It undoubtedly will be urged that findings for New York State are not applicable to the U. S. as a whole. Dr. Eli Ginzberg of Columbia's Graduate School of Business, who directed the survey and put its findings into a book. *A Pattern for Hospital Care,* thinks otherwise. New York is admittedly richer than most states in the union, and its ratio of doctor and bed capacity per capita is at the top. But Dr. Ginzberg, who received buttressing material from thirty other states in the course of making the New York survey, believes that his findings have great relevance to a majority of the states. What New Work can do, other states can do. Certainly on Dr. Ginzberg's showing states like Pennsylvania, Massachusetts, Illinois, Ohio and California with rich and large centers of population can aspire to New York's record.

The most astounding statistic turned up by the Columbia survey is that 57 per cent of the New York State population was covered by some type of voluntary hospital insurance at the end of 1948 —and the figure has kept growing throughout 1949. Eventually, Dr. Ginzberg thinks some 85 per cent of the New York population could be enrolled in Blue Cross or commercial voluntary insurance plans. If the 85 per cent figure can be approximated in the more populous states, then the case for national compulsory medical insurance must fall flat. Limited federal aid for specified purposes in sub-par areas is demonstrably necessary. But this is a far cry from total federalization of U. S. health services.—Reprinted by permission, from *LIFE*, December 5, 1949. Copyright, *TIME,* Inc.

AS WE SEE IT

Federal Security Administrator Oscar Ewing recently spent a week in England, "studying" the Labor Government's system of national medicine, which he hopes to duplicate in the United States.

Ewing had hardly gotten off the boat before he told a press conference that Britain's socialized medicine "was working remarkably well," and "exposed" an American medical group which had sent funds to "diehard" British doctors with which to fight state medicine.

The British medical profession, however, had the last word. The "diehards," otherwise the British Fellowship for Freedom in Medicine, sharply challenged the truth of Ewing's statements on all counts. The American funds received were infinitesimal, amounting to about $500; membership of the British Fellowship comprises more than 10 per cent of the practitioners in Great Britain, and Ewing was accused either of deliberately lying or not having the faintest conception of what he was talking about.

Of course, Ewing's statements were really for American, rather than British consumption. They merely followed his technique of distortion by which he hopes to socialize America, starting with medicine.

That's not a prescription which the American people want. They prefer the truth about such a controversial issue, sans emotion of the Ewing kind. Moreover, they want full, adequate medical care; not the impersonal socialized panacea of the type of which our own Receiving Hospital recently gave us an example when it left an injured man, unattended in the corridors, to die from lack of attention.—Editorial, *Detroit Free Press,* December 14, 1949.

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President's Address

By E. F. Sladek, M.D.
Traverse City, Michigan

THE PAST YEAR has been marked by outstanding discoveries and accomplishments in the field of medicine and surgery—new instruments, techniques, and drugs to help fight and conquer illness. However, it also has been marked by another quite different but significant action. Our doctors of medicine have stepped down from their ivory towers and removed their cloaks of scientific isolation. They have suddenly realized that, in addition to being doctors, they are also citizens, and as such, believing in a free America, they have to become torch bearers for private enterprise.

For a number of years a few officers and committees of organized medicine were cognizant of the trends to the left on a national level. Almost alone they performed a yeoman service in fighting off socialized medicine. Most of our doctors did not then fully realize the real social implications of legislation such as the Wagner-Murray-Dingell bills repeatedly introduced in Congress.

The dramatic announcement of President Truman, following his election, stating, by implication, his determination to establish the welfare state, with a national compulsory sickness insurance plan as a primary requisite, awakened the nation to impending danger.

The medical profession, finding itself the target of the attack, became thoroughly aroused and determined to do something about it. From intensive studies of past and present legislative proposals in the field of health, doctors across the nation concluded that, among other things, the social planners were using the catastrophe of sickness as a stepping stone to the socialized state. An analysis of legislative bills showed that government could not, and would not, guarantee definite set medical services, nor could they estimate or predict the actual costs of these services. They were asking the public to give them a blank check to cover, by taxation, these undetermined costs. In return for this, they would set up rules, regulations, and directives to determine *forever* the way you, as a citizen, would get medical care, the kind you would get, and from whom you would get it. The medical profession would in turn be told whom to treat, the type of medical and surgical treatment we could administer, and for how long a period. What does this add up to? Dictation for you and for us. Like you, we don't like it.

History has proven that once government gains control of sickness and health of its people, it is very easy to expand to the eventual control of all professions, of all businesses, of all industries, and of all occupations. This fight to prevent the establishment of the socialized state is not that of the medical profession alone, but one that involves *all* our people. The sad fact remains that we, as individual citizens, have no official vote as to whether or not we want socialized medicine and the welfare state. In modern politics, that is the task of our lawmakers. But in this republic we do have one recourse, and that is to tell our own legislative representatives how we feel about this proposal. They still heed the majority opinion.

The medical profession, through the American Medical Association, has been accused of developing the most powerful and richest lobby ever to confront Washington. We have been accused of extreme selfish interest—because, by a voluntary as-

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sessment we have developed a fund of about three million dollars, which we are using to educate the American people as to what modern medicine is, and does, and offers by voluntary action. Our critics conveniently forgot to mention the seventy-five millions available to the Federal Security Administration specifically for so-called "educational" purposes, and that this huge fund is being used principally to advance the cause of socialized medicine and the welfare state.

The past two decades have witnessed a tremendous change in American medicine. Our medical schools have greatly increased their educational standards and the caliber of their teaching staffs. They have instituted a markedly expanded curricula, and established research projects resulting in new and finer medical and surgical techniques. Greater efficiency in the appurtenances of medical practice has been developed. Together with organized medicine, intramural and extramural courses have been established for the continued postgraduate medical education of our practicing doctors. All this has resulted in the highest type of medical personnel and medical procedures for the American citizen. May I repeat, this has been for the American citizen—and by *voluntary* action.

Organized medicine has insisted on high standards for specialized medical services, has instituted residency training in the specialties, and boards for examination and certification in these specialties. It has developed societies and groups of doctors interested in special or specific diseases, thus making available to the public a superior type of consultive service when necessary.

Many community organizations and groups have projects relating to health. Our doctors are active in them and give unstintingly their time, scientific knowledge, and personal assistance to help solve both health and community problems. The great public good done by these organizations is due in a large measure to this voluntary co-operation of the doctors. They work hard to promote and achieve success for the Michigan Health Council, the Rural Health Conferences, polio, tuberculosis, cancer, heart, crippled children, rheumatic fever, and a host of other campaigns in the health field. Truly the doctor is also the citizen and recognizes his duties as a citizen.

Organized medicine is cognizant of the fact that social service is a definite part of medical service. They know that modern medical practice is not perfect and does not serve all of our people to the best advantage, and that illness can be a financial disaster to the patient. To help solve this, the medical profession proposed, developed, and implemented our voluntary, nonprofit, prepayment, medical, surgical, and hospitalization plan. I am proud to say that our own Michigan State Medical Society was a pioneer in this endeavor. Beyond any question of doubt, the success of these plans is giving a highly satisfactory service to our people. They are truly American, administered in the American way, for Americans.

We realize that these plans are not perfect, nor as completely adequate as desired. However, through intensive study of economic and social conditions, and by actual experience, they are being rapidly broadened and amplified to include and cover more and more of the financial hurdles of illness. In addition, they already have stood the test of time, and we have definite knowledge as to basic costs—not theoretical, but factual. This knowledge is being put to use immediately, as evidenced by the recommended expansion at this annual meeting of the Michigan Medical Service to serve new income groups—a higher income group than has ever been covered previously by any prepaid medical service plan. The ideal of a medical service plan is to offer *complete* coverage. We will have gained that objective in this new proposed policy.

Do you think that these objectives and accomplishments denote selfish interests? Are we self-seeking when we bring to the attention of our patients and neighbors facts and figures on illness and health, which, surely, we doctors of medicine know more about than do the politicians? Are we employing power politics when we attempt to inform our legislative representatives that we know that the great majority of our people do not want socialized medicine and the welfare state? Surely, if America is to remain a country of free enterprise—a country of the people and for the people —then it is the people, in addition to the doctors, who must think and act.

The campaign of the American Medical Association, ably assisted by the Michigan State Medical Society, has been eminently successful to this date. Precipitate action has been postponed by Washington. We have been granted an opportunity to continue our educational campaign until next spring. As citizens, we cannot rest upon our laurels now, but must be ready with positive and

(Continued on Page 74)

Experiences with Routine Rh Typing in Obstetrics

Observations in a Series of 100 Rh Negative Pregnant Women

By Charles W. Aldridge, M.D., and
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Ann Arbor, Michigan

ALMOST TEN YEARS have elapsed since Landsteiner and Weiner[12] discovered the Rh factor and Levine[13] pointed out its relationship to transfusion reactions, erythroblastosis fetalis and congenital hemolytic anemia. During this time a wealth of laboratory work has been done, yielding a clearer understanding of the serologic, genetic, pathologic and anthropologic manifestations of this problem. There has, however, been a lag between the clinical application and the progress in the laboratory. The lack of men trained in the technique and theory of this field and the scarcity of typing sera are perhaps two of the several reasons for this. Some of these difficulties have now been overcome, and the way lies clear for a more widespread study of the Rh problem. Not until a large number of cases have been carefully observed, both clinically and by the laboratory methods available, will correlation of knowledge be possible and improvement of antepartum and postpartum treatment follow.

More and more the Rh type is becoming an important part of our routine initial "work-up" of any patient. It is especially important in the obstetrical patient. During the last year, the services of the Michigan Department of Health Laboratory have been made available for Rh determinations at no cost to the patient, and in most cases antibody determinations will be done on request. This indeed is a step toward focusing more widespread clinical attention on this problem.

Incidence of Rh Incompatibility and Sensitization

Genetically speaking, since the Rh-negative trait is recessive, the true Rh-negative individual must be homozygous, and the genotype must be expressed by the symbol "rh rh" (rr-Weiner[23] cde-Fisher and Race[7]). The red blood cells of these individuals will not agglutinate with any of the three anti-Rh serums (anti-Rh′ anti-Rh," anti-Rh°). They make up 13 per cent of the general population (Caucasians). The rest of the population are Rh positive inasmuch as their red blood cells will agglutinate (at 37°C.) with at least one of the three anti-Rh serums. Since the Rh-positive trait is dominant, however, these persons may either be heterozygous (Rh rh) or homozygous (Rh Rh). General population figures quoted by Sacks[19] show that 41 per cent are homozygous (Rh Rh) while 46 per cent are heterozygous (Rh rh).

From the above information, as expressed in Figure 1, one can predict much about the occurrance of Rh incompatibility: 11.3 per cent of all matings will be between Rh-negative women and Rh-positive men. Of these 11.3 per cent, 5.3 per cent will be with homozygous men, and 5.98 per cent will be with heterozygous men. One-half of the children from matings with heterozygous men will be Rh negative and one-half will be Rh positive. Of all children born of Rh-negative mothers 8.32 per cent will be Rh positive. In only these 8.32 per cent, then, will the opportunity for sensitization to the Rh factor exist.

When the opportunity exists, however, sensitization does not always occur. Sacks[19] has reported less than 10 per cent of the expected incidence of sensitization in all pregnancies. Only 5.26 per cent of all Rh-negative female—Rh-positive male matings showed evidence of sensitization. The opportunity for sensitization in such matings occurs in 73 per cent. Conversely, sensitization is also not observed in all cases of erythroblastosis. The absence of antibodies in the presence of erythroblastosis fetalis has been observed by various authors[19,21] in about 10 per cent of all cases of erythroblastosis. The discrepancy between the theoretical and observed figures has been attributed to: (1) the infrequency of evidence of erythroblastosis fetalis in first pregnancies in the absence of previous transfusion or blood injection, (2) variation in placenta permeability to fetal red blood cells, (3) variation in maternal response to antigenic stimulation, (4) failure to find other antigens and antibodies such as Hr, A, B, M, and Rh subtypes because of scarcity of sera and weakness of serologic response.

In addition, it appears that even after sensitization develops, as evidenced by appearance of antibodies in the mother's serum during pregnancy, the

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infant is not doomed to show clinical or even subclinical evidence of erythroblastosis fetalis. Sacks[19] reports that 67.19 per cent of the children of sensitized Rh-negative mothers which he observed —Rh-negative female matings which develops erythroblastosis in the absence of sensitization, only 5.26 per cent became sensitized. This cuts our incidence down to .45 per cent of all matings. Then,

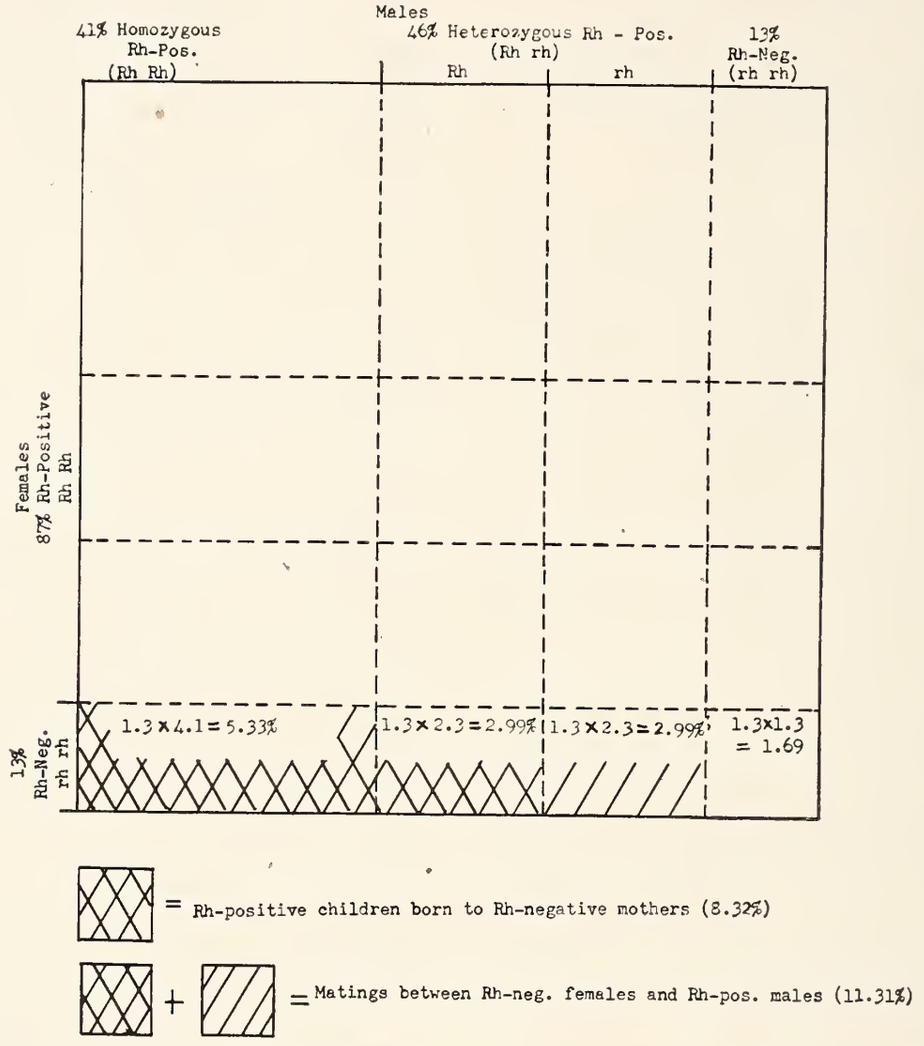

Fig. 1. The incidence of all possible types of Rh matings in the general population (adapted from Sacks[19]).

had varying manifestations of erythroblastosis fetalis. This difference, he states, is due to (1) failure of antibody to reach a high enough level to produce disease in the infant, or (2) delivery of an Rh-negative infant in a mother whose antibody was formed as a result of previous stimulation. As will be pointed out later, others feel that the type of antibody, the titer of antibody, and the duration of exposure to antibody also play a role in the production of erythroblastosis fetalis.

Consider then the chances of any women having an infant showing manifestations of erythroblastosis. First she must be one of the 13 per cent which are Rh negative. She then must qualify by having an Rh positive child. This incidence, as we have pointed out, is 8.32 per cent. Excluding the small group (10 per cent) in all Rh-positive male in this group of sensitized individuals, if we accept Sacks figure of 67.1 per cent of these which show erythroblastosis, we end up with .30 per cent of all matings that will show erythroblastosis fetalis. This agrees with the observed incidence as quoted by Weiner[22] to be one in 300 of all deliveries (.33 per cent). Actually Rh-negative women have about a 2.3 per cent chance of having children which show evidence of erythroblastosis fetalis. Of course, all fetal disease due to Rh sensitization will not be fatal.

The general public has been copiously educated regarding the Rh factor. It seems, however, that most such reports have been over-alarming. Physicians are well acquainted with the panic often observed when a patient is first informed she is "Rh negative." Lay fear of the Rh problem could

be partly dispelled by clarification of the factors influencing the incidence of erythroblastosis fetalis and by pointing out the effectiveness of treatment in the less severe cases.

Relations of Rh Isoimmunization to Parity, Abortion and Stillbirth

Parity.—Isoimmunization does not occur in first pregnancies if there has been no pre-existing sensitization. With each succeeding pregnancy sensitization and evidence of erythroblastosis is more likely to occur. If erythroblastosis is mild in one pregnancy, subsequent pregnancies will yield more serious manifestations of the disease, including hydrops and stillbirth.

The above is a usual description of the relationship between parity and isoimmunization. In any one case, however, one may find considerable variation from this general trend. Coombs[3] reports that only six out of ten primigravida with antibodies gave a history of previous transfusion. Howard[8] found antibodies in twelve of forty-eight primigravida, one of which had an erythroblastotic infant. Spalding[20] also describes a first pregnancy which resulted in a macerated hydropic fetus, in which after careful questioning there was no history of previous blood transfusion or injection and in which the agglutinating antibody titer was 1:64. On the other hand, Abt as quoted by Darrow[4] has seen an infant with familial jaundice of the newborn which recovered after several siblings had died of icterus gravis. It seems then, that antibodies can and do develop in primigravida, and also that sensitized multipara are not doomed to repeatedly produce children with increasing evidence of erythroblastosis.

These variations in occurrence of pathological manifestations of Rh isoimmunization are, at least in part, explainable by our present knowledge of the pathogenesis of this disease. If the father is heterozygous, a woman may become sensitized by several Rh-positive children and then have an Rh-negative child which will not cause further sensitization nor be affected by antibodies produced by previous pregnancies. Erythroblastosis fetalis may be produced by the less frequently occurring Rh types (Rh,′ Rh,″ Rh′Rh,″ Rh_0, Rh_1, Rh_2, Rh_1 Rh_2—Weiner). The antigenic properties of these types are less than the more common Rh antigen (rh) and the disease produced by sensitization to them is rarer and milder. However, an individual may be Rh positive by tests with the most common anti-Rh (Rh_0) serum and still deliver an erythroblastotic infant due to Rh sub-type sensitization. Similarly several erythroblastotic infants may be produced in one family due to sub-type isoimmunization, and then a normal infant be delivered when the fetal sub-type agrees with the maternal sub-type due to fraternal heterozygosity.

These experiences of others tend to strengthen our view that, at present, sterilization of a patient who has had several infants die of erythroblastosis fetalis is not indicated. It seems evident that the serologic and antibody tests now available to us do not give us a clear enough picture of any one family's serologic make-up to be dogmatic enough to recommend such an irreversible procedure.

Abortion and Stillbirth.—At first there was general agreement among most investigators that no relationship between the Rh factor and abortion could be demonstrated by the tests then available. In 1942 Javert[10] said, "Unless additional evidence shows the contrary, early habitual abortion should not be attributed to isoimmunization." With the development of more sensitive tests, however, the question of the significance of Rh isoimmunization has again been raised.

Sacks[19] and Levine[15] have found a higher incidence of spontaneous abortion in Rh-negative sensitized women and believe that further investigation is necessary. On the other hand, Overstreet[16] has found very little difference in the total abortion rate of Rh-negative and Rh-positive women. He also does not find a greater abortion rate in Rh-negative mothers with one child having manifested evidence of hemolytic disease. Hunt's study[9] also supports these findings.

Hunt[9] has presented a theoretical explanation of why Rh-isoimmunization is not a factor in the etiology of early abortion. He points to work of Page, Hunt and Lucia[17] which indicates that antibodies must be produced for a period of about ten weeks before fetal damage occurs. By analogous reasoning from the time of appearance of fetal B-agglutinogen[1] he proposed that the earliest possible production of Rh-antigen should be the second to fourth week of pregnancy. If this is true, then of course isoimmunization is impossible before that time. By further assuming "that several weeks more than the ten weeks period might be required to produce damage extensive enough to result in

expulsion of the pregnancy, then the summation of the time factors alone would be in the neighborhod of twenty weeks, the onset of viability."

To demonstrate the agglutinating or bivalent antibody, a 2 per cent saline suspension of type O Rh-positive cells is tested against an unknown

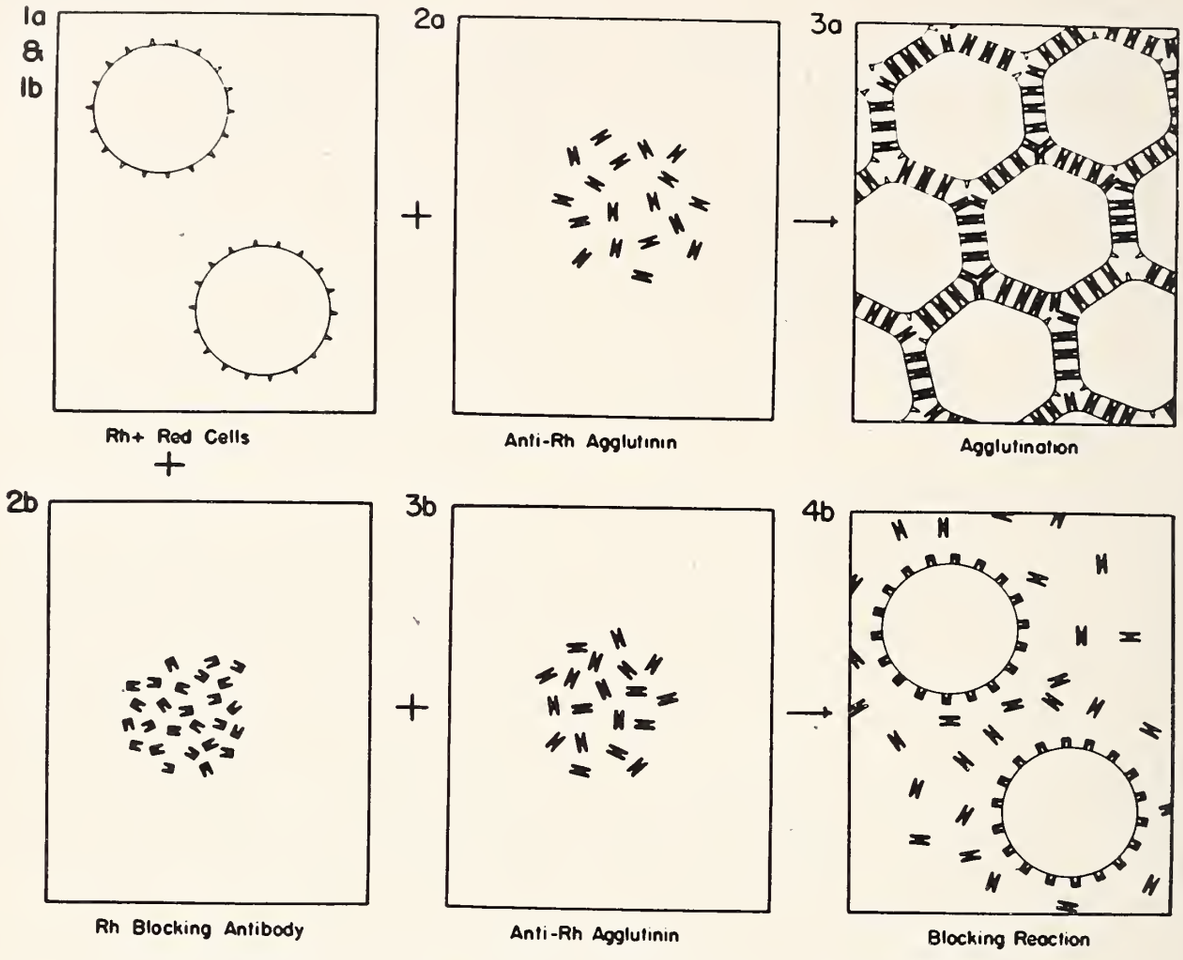

Fig. 2. Comparison of Rh agglutination and blocking reaction (tests in saline media).

Clearly the above discussion of Rh-isoimmunization and early abortion cannot be applied to a similar discussion of the relationship of Rh to neonatal death and stillbirth. These conditions are known to be caused by the presence of maternal Rh antibody in the fetal circulation. Hunt[9] found a neonatal death and stillbirth rate of 6.4 per cent in Rh-negative women compared to 1.5 per cent for Rh-positive women. Undoubtedly the major portion of the 6.4 per cent were more severe forms of erythroblastosis, including hydrops and icterus gravis.

Importance of Antibody Determinations

Until 1944, more than one-half of all pregnancies resulting in erythroblastosis fetalis lacked demonstrable antibodies. Since the blocking antibody was found by Race,[18] Weiner[22] and Diamond,[6] almost 100 per cent of all cases show antibody at some time during the antepartum or postpartum period.

serum at 37°C. Clumping indicates the presence of agglutinating antibodies. Weiner describes the mechanism of this reaction as follows: "The surface of the erythrocytes can be visualized as being covered with hundreds of thousands of hapten groups. The agglutinins on the other hand are modified gama globulins and behave as if they possess two or more specific combining groups. When a blood suspension and agglutinins are mixed, each molecule or antibody links two red cells together and clumping occurs by the formation of a lattice work" (Fig. 2).

To demonstrate the blocking or univalent antibody, a 2 per cent suspension of O Rh-positive cells in AB serum or pooled plasma is used in a test with the patient's serum, as for the agglutinating antibody. If the test for agglutinating antibody is negative and clumping now occurs, the blocking antibody is present. The mechanism of this reaction can best be visualized if we consider the blocking antibody as having only one specific combining

group. When these cover the hapten groups of the erythrocytes, clumping cannot occur unless a third factor is present, which Weiner calls conglutinin or x-protein. Weiner states that "many proteins in concentrated solution form colloidal aggregates that can function as conglutinin." X-protein is rendered inactive by dilution in saline and therefore blocking antibody cannot be demonstrated in any but a non-aqueous solution (Fig. 3).

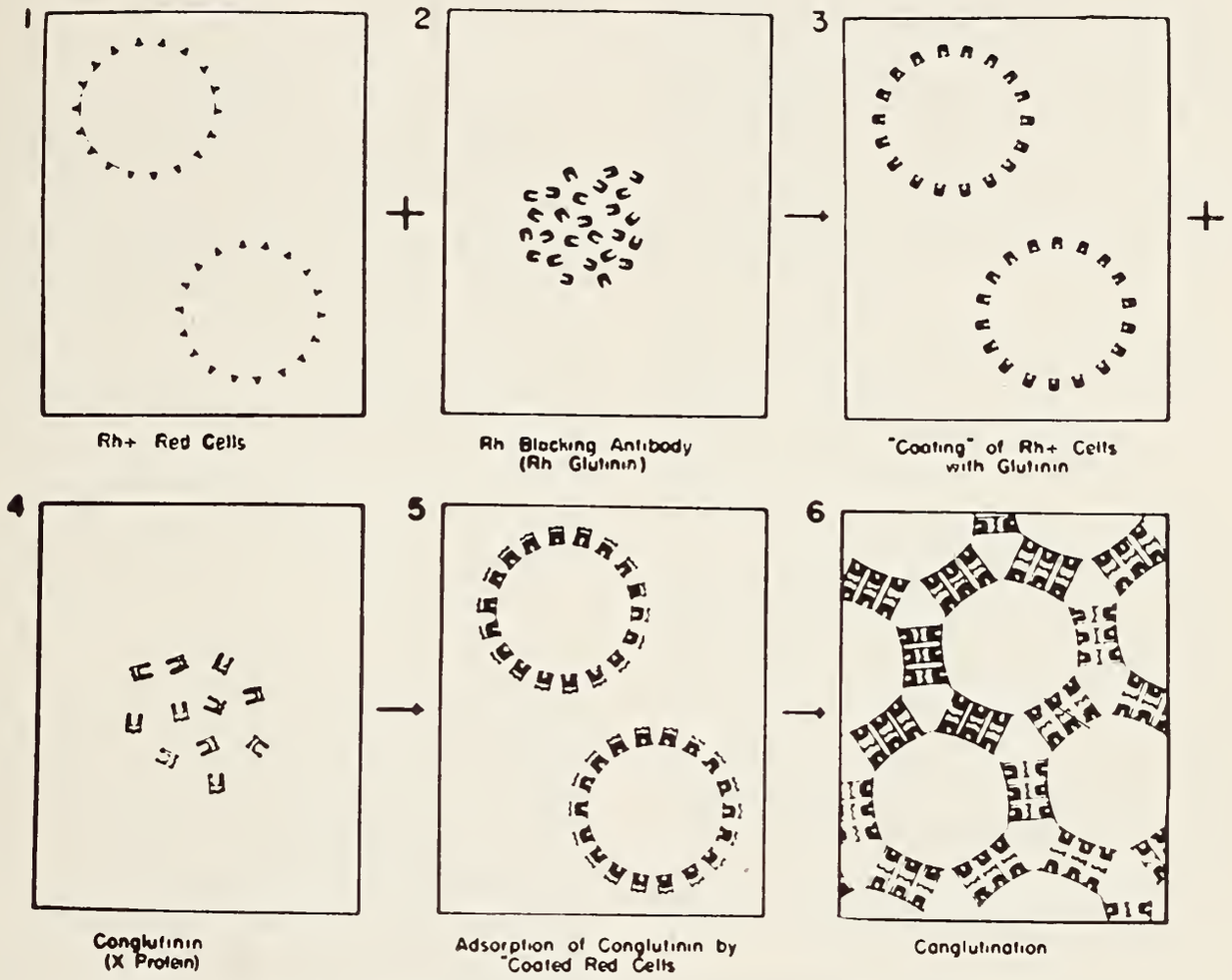

Fig. 3. Rh conglutination reaction (tests in plasma or serum media).

Weiner believes that most isoimmunization takes place during labor and delivery because contractions of the uterus at that time "milk" more fetal cells into the maternal circulation. Levine on the other hand feels that antibodies may develop at any time during pregnancy, especially during the last trimester.

Another recent concept proposed by Weiner[22,23] concerns the pathogenesis of erythroblastosis. It is his hypothesis that erythroblastosis fetalis consists of three distinct, though related, clinical diseases determined by qualitative differences in the abnormal maternal antibody. First under this heading comes icterus gravis neonatorum, which is primarily derived from isoimmunization by the agglutinating antibody. This antibody, being of larger molecular weight than the univalent antibody, passes through the placenta with greater difficulty and mostly at the time of labor. The second group, congenital hemolytic disease, is mainly the result of univalent or blocking antibody isoimmunization. These antibodies, being of smaller size, pass through the placenta more readily during pregnancy. The resulting fetal disease is not as severe as the first groups. The third group includes icterus precox, which is derived from A and B antibodies and is the mildest form of this group of diseases.

Other investigators believe that the study of antibodies will reveal more information of prognostic importance. Howard[8] found that a group of women who were delivered of infants with frank hemolytic disease showed less blocking antibody than agglutinating antibody before delivery, while a group of women who were delivered of infants with milder subclinical hemolytic disease showed a higher antepartum titer of blocking antibody than agglutinating antibody. A reciprocal relation-

ship between the blocking and agglutinating antibody was also observed, but he felt that no deductions should be made from this data. A protective action of blocking antibody has been suggested by many investigators, but as yet no definite conclusions can be made, mainly because it cannot be determined if the *in vitro* behavior and tests for the two antibodies are typical of the reactions *in vivo*.

Howard,[8] Sacks[19] and others have also observed a direct relation of the duration of exposure to antibody and the level of antibody titer to the seriousness of the resulting fetal pathology. Howard, however, believes that they have demonstrated that the duration of exposure to antibody is first in importance. Sacks and others disagree, feeling that duration of exposure to antibody is secondary to the strength or degree of isoimmunization, as reflected by the height of antibody titer.

As yet, there seems to be no general agreement in the interpretation of antibody findings. However, it does seem that this is indeed a fertile field for further investigation. The day may not be far off when it will be possible to predict the outcome of a pregnancy involving Rh-isoimmunization by study of antepartum antibody production.

Prevention of Rh-Isoimmunization and Treatment of Erythroblastosis Fetalis

Kariher[11] has pointed out that, theoretically, prevention of erythroblastosis fetalis during pregnancy could be accomplished by any of three different means: (1) prevention of the antigen-antibody reaction by chemical means, (2) absorption of antibody by Rh hapten injection, (3) inhibition of Rh antibody production by some immunological means.

Kariher[11] has presented a possible approach by the first method, mainly, by repeated injections of small doses of ethylene disulfonate. He reports three successful cases but leaves the matter to further clinical trial before making any conclusions.

Recently, the isolation of Rh haptens has been reported.[2] As yet there has been only limited clinical experience with them. However, this is indeed a promising field for further investigation.

Weiner[21] has approached the problem from immunological angles. He states that it is a general immunologic concept that if the two antigens are given simultaneously, the more potent one tends to suppress the antigenicty of the less potent one. In other words, the administration of some potent antigen such as diphtheria, pertussis or typhoid innoculations might suppress the reaction of the relatively weak Rh antigen. A few case reports have been published which apparently prove that this does occur.

Methods

During the twelve-month period from October, 1946, to October, 1947, there were 850 deliveries on the private and clinical services. Each patient who registered on the obstetrical service received as part of her routine laboratory examinations a blood type and Rh determination. An attempt was made to investigate the Rh type of the husbands of all Rh-negative women. If he was Rh positive, indicating an incompatability, blood was obtained from the woman at varying intervals during the last trimester. These specimens of serum were then tested for the presence of Rh hemagglutinins by two methods: (1) In the microscopic slide test,[10] the serum was mixed with the proper type of heparinized whole blood on a slide and agglutination read three to six minutes later. The slides were kept warm on the lid of a water bath adjusted to 37° C. (2) A further check on the occurrence of antibodies was made by sensitizing washed test cells with the woman's serum and mixing these cells with anti-human globulin rabbit serum according to the method of Coombs and Race.[3] When antibodies were demonstrated by the above tests the woman's serum was titrated by two-fold serial dilution in (1) a 2 per cent suspension of washed O Rh-positive cells in saline, giving the titer of agglutinating antibody; (2) A 2 per cent suspension of washed O Rh-positive cells in homologous adult serum, giving the titer of incomplete, conglutinating or blocking antibody. Agglutination or conglutination was read as the highest dilution of the serum giving grossly visible clumping.

Regardless of whether the mother had shown antibodies or not, all babies born to Rh-incompatible couples were followed carefully for evidence of developing erythroblastosis. Cord blood was obtained at delivery for typing and antibody studies as outlined above. The baby's hemoglobin and red blood cell count were determined immediately after birth and every four to six hours for the first twenty-four hours of the neo-natal period. If there was no abnormal drop in these values, repeat determinations were done twice the next day and then daily until the infant was discharged from the hospital on the tenth day. If there was

any suspicious fall in the cell count or hemoglobin, more frequent examinations were carried out as indicated. Likewise, the infant was closely watched for the appearance of any clinical sign of possible Rh difficulties. Following discharge from the hospital, the hemoglobin and red cell count were checked at varying intervals until after the six-week check-up examination.

We have routinely examined all placentas microscopically for evidence of erythroblastotic, anemic, or hydropic changes. Products of abortions, stillborn infants and neonatal deaths were similarly investigated. Thus, a review was made of any tissue specimens sent to the pathology department from the pregnant women involved in an Rh incompatibility.

An attempt was also made to determine any possible correlation between Rh incompatibility and abortion, stillbirth, or toxemia or pregnancy.

Results

Of the 850 deliveries during this twelve-month period, we had 100 women who were correctly typed as Rh negative. (There were twelve persons who were incorrectly typed Rh negative at first. The number incorrectly typed Rh positive is not known). The husbands of eighty-eight out of these 100 were typed, and seventy-nine were found to be Rh positive. Antibody determinations were done on seventy-six (95 per cent) of all our known Rh-incompatible couples, and were positive in three cases. The children of these three showed evidence of erythroblastosis. The cases are presented in order of increasing severity.

Case 1.—C. B., 596998, twenty-five-year-old white woman, para 2, gravida 3, type 0, Rh negative. Husband: type 0, Rh positive. First child had spinabifida; second child was normal. At the time of delivery of her third child, a 3-plus conglutination (blocking antibody) was demonstrated. The Diamond slide test showed 4-plus agglutination ten days postpartum and remained positive for more than one month. The infant was normal at birth with a hemoglobin of 21 grams (5.6 million red blood cells). The cord blood was type 0, Rh negative. There was no abnormal drop in hemoglobin or red blood cell count during the ten-day hospitalization after birth. At one month, however, mainly because the mother was showing antibodies, the baby was retyped and found to be 0, Rh positive. At this time, the baby's hemoglobin was 6.7 grams with erythrocyte count of 2.37 million. Several transfusions of Rh-negative blood were given, with prompt return of the hemoglobin and red blood cell count to normal. The baby survived with no further complications.

Case 2.—C. S., 515618, twenty-three-year-old white woman, para 1, gravida 1, type 0, Rh negative. Husband: type 0, Rh positive. This patient had been transfused with her husband's blood on one previous occasion without reaction. She had no antibodies at the end of her fifth month, but in the ninth month her Diamond slide became 3-plus with a 4-plus agglutination of cells suspended in anti-human globulin rabbit serum, indicating blocking antibodies. At birth, the baby was markedly jaundiced. The hemoglobin was 7.5 grams with red blood count of 1.41 million. In spite of transfusion the baby died shortly after birth. The baby was type 0, Rh positive. Autopsy revealed generalized icterus and erythroblastosis.

Case 3.—E. L., 620756, thirty-two-year-old white woman, para 2, gravida 3, type AB, Rh negative. Husband: type A, Rh positive. First pregnancy was uncomplicated. Second baby became severely jaundiced and was a congenital spastic, but lived. The Rh type of both children is unknown. Although it cannot be proved, sensitization probably occurred during the second pregnancy. During the third pregnancy, her serum showed a 2-plus agglutination on the Diamond slide test two and one-half weeks before delivery. Six weeks after delivery, she had a high blocking antibody titer but no agglutinating antibody. Because she developed pre-eclamptic toxemia at the end of her pregnancy, labor was induced and delivery of a large hydropic infant was accomplished by a destructive operation. At autopsy, the baby showed the typical pathologic changes of erythroblastosis, including splenomegaly and hepatomegaly.

Stillbirth occurred four times in our group of 100 Rh-negative patients. In only one of these were antibodies demonstrated (Case 3).

Only two clinically significant toxemias of pregnancy developed in our 100 Rh-negative patients. One of these showed antibodies (Case 3). The other had an associated abruptio placenta, and the husband's blood type and antibody studies were not done.

The placentas of the three women showing antibodies failed to reveal any changes characteristic of erythroblastosis. On the other hand, eight aborted placentas from Rh-negative women without antibodies showed some hydropic change in the chorionic villi. The placentas of five other abortions in our incompatible group were normal.

Autopsies performed on the four infant deaths in our incompatible group revealed evidence of erythroblastosis in two (Cases 2 and 3).

Discussion

An analysis of our series permits only a limited appraisal of the incidence of various Rh problems and complications. Although there are ramifica-

tions to this problem, many of which are not thoroughly understood, complications attributable to Rh incompatibility are relatively rare in any total series of obstetrical patients studied.

The incidence of Rh-negative women in our series is 11.8 per cent (100 out of 850). The incidence of Rh-negative men is 10.2 per cent. (Seven out of eighty-eight). These figures agree fairly closely with the general population (Caucasians) incidence of 13 per cent. They are somewhat less because of the small size of our group and the inclusion of both colored and white women in the study.

There were forty Rh-positive infants born to fifty-six Rh-incompatible couples in which infant typing was carried out. This is an incidence of 72 per cent compared to the theoretical of 73.6 per cent. It can be calculated that 64 per cent of all Rh-negative mothers (regardless of husband's type) should have had Rh-positive infants. However, since the Rh type of all infants was not obtained, we cannot determine accurately this incidence.

In our fifty-six completely studied cases, we had sixteen (twenty-eight per cent) Rh-negative infants, which compares favorably with the expected occurrence of 26.49 per cent.

We found that 89 per cent of our Rh-negative women were mated with Rh-positive men. The general population figure is 87 per cent.

It can be determined that 73.6 per cent of all Rh-negative women mated to Rh-positive men will bear Rh-positive infants and therefore the opportunity for sensitization exists. As Sacks[19] has pointed out, however, actually only 5.26 per cent of all Rh-negative women mated with Rh-positive men show sensitization. Possible reasons for this have been outlined. Thus, although 73 per cent of our known seventy-nine Rh-incompatible couples with antibody studies had an opportunity for sensitization, only 5.2 per cent should have actually shown antibodies. Our three cases showing antibodies then is somewhat less than the expected incidence.

As Sacks[19] has further pointed out, evidence of erythroblastosis is observed in only 67 per cent of all Rh-negative sensitized mothers. We observed evidence of erythroblastosis in 100 per cent of our sensitized mothers in this series. Since the completion of this series, however, we have also confirmed the fact that sensitization does occur without evidence of erythroblastosis, and that erythroblastosis occurs without demonstrable sensitization. We, therefore, observe all babies from Rh-incompatible couples regardless of whether antibodies are present or absent. Type O, Rh-negative blood should be available at delivery of any Rh-negative woman.

All except one of our cases developing antibodies were multiparas. Our primipara bearing a hydropic infant had a history of previous transfusion with known Rh-positive blood. This emphasized the importance of testing for sensitization during first pregnancies.

Fifteen per cent of our Rh-negative women had one or more abortions. This is probably not above the total abortion rate in Rh-positive women. The possible necessity for re-evaluation of this problem has been pointed out.

Hunt's finding of 6.4 per cent stillbirth rate in Rh-negative women and an incidence of 4 per cent in our series logically indicates that this rate is higher in Rh-negative women.

The occurrence of two toxemias of pregnancy (pre-eclampsia) in our 100 Rh-negative women is probably not higher than one would expect in a similar unselected group.

Although all three babies were affected in the cases which demonstrated antepartum antibodies, the placenta in only one showed hydropic changes. However, some degree of hydropic changes were observed in the placentas of fourteen abortions in Rh-positive incompatible couples. We can draw no conclusions as to the relationship between Rh and placental pathology from this.

Summary

1. A brief review of the literature has been made with an attempt to develop the recent concepts of the Rh problem.

2. An analysis of a series of 100 Rh-negative pregnant women is presented.

We wish to acknowledge the contribution of Mrs. Delores Morriss and Dr. J. V. Quilligan, Jr., of the Department of Pediatrics Laboratory, who are responsible for doing the antibody determinations in addition to their many other duties.

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Extra-abdominal Causes Producing Acute Abdominal Signs

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IN AN ATTEMPT to diagnose an acute surgical emergency residing in the abdomen, accompanied by pain, many disturbances other than those causing acute surgical emergencies must be ruled out—a task which, by virtue of the pain the nonsurgical etiologic agents produce, may become quite perplexing to the examiner and of life-importance to the sufferer. An attempt will be made in this paper to discuss rather briefly some varied and common disturbances leading to acute abdominal pain of nonsurgical import. In the beginning it is of interest to note that Edmund van Neusser[12] states that "the history of the case should give us our correct diagnosis; the physical examination and laboratory tests should be merely confirmatory." Further, Zachary Cope[17] states, "The general rule can be laid down that the majority of severe abdominal pains which ensue in patients who have been previously fairly well, and which last as long as six hours, are caused by conditions of surgical import." This is further emphasized by the statement that a "persistent abdominal pain associated with nausea and vomiting and interference with bowel action, lasting more than six hours, usually requires surgical intervention."[20]

Briefly, the nervous mechanism for the production of pain shall be considered due to its importance in the differential diagnosis of many causes of abdominal pain.

Pain from the viscera is conducted from the nerve endings through the sympathetic fibers to the spinal tract. That this is true has been shown by the fact that sectioning of these nerves is followed by a relief of pain. In the somatic nerves a special portion of the nerve conducts pain. Somatic nerves have been shown to contain three types of nerve fibers designated A, B, and C fibers, each type physiologically different from the other. The A fibers range from 20 to 1 micron in diameter, with a conduction speed of from 120 to 5 meters per second; the B fibers are less than 3 micra in diameter and have a conduction velocity of from 15 to 3 meters per second; and the C fibers are unmyelinated, with a conduction speed of from 2 to 0.6 meters per second. In the presence of asphyxia the fibers are susceptible in the following order: B, A, and C. The A fibers constitute the somatic efferent and the B and C the somatic afferent and sympathetics. In the spinal cord the posterior root fibers conveying pain cross and form two tracts: the ventral and dorsal spinothalamic tracts. These tracts may be divided (chordotomy) in cases of intractable pain due to inoperable malignancies, with a relief of pain. From the thalamus, ipsilateral thalamocortical projections synapse and terminate in the postcentral gyrus, the cortical area of pain representation. Pain may be relieved then, by sympathectomy, rhizotomy, cordotomy, or subduing the cortical area of representation. Pain may be referred to an area from which it did not arise due to the anatomical relations; it is referred to the dermatomes supplied by the posterior roots through which the visceral afferent pain impulses have reached the cord.

Visceral pain differs from somatic pain in character, being dull, indefinite, gnawing, boring, and constant. It may be due to dilatation or distention of a hollow viscus, spasms of smooth muscles or vigorous contractions in the presence of ischemia, or due to chemical irritants. Somatic pain characteristically is sharp, shooting, stabbing, lancinating, and easily localized. So often, however, the case occurs in which these characteristics tend to merge, adding complexity to the type differentiation. This merger could be explained by the theory of Mackenzie[34] of the nervous mechanism of visceral pain which proposes that true visceral pain does not occur, but rather impulses arising in diseased viscera pass via the sympathetics to the cord to establish an irritable focus with an overflow of impulses into the specialized somatic pathways. With true visceral pain, abdominal tenderness and rigidity do not occur, this happening only when the parietal peritoneum is irritated causing impulses which are conveyed through the somatic nerves.[35]

Of the extra-abdominal causes of abdominal pain, diseases of the heart and cardiovascular system should be considered. Epigastric pain *per se* cannot be regarded as a criterion of diagnosis[23] of diseases of the abdomen. Congestive heart failure, hypertension, pericarditis, aortic aneurysm, cardiac irregularities, myocardial infarction and periarteritis are conditions which have produced

epigastric pain.[4] It has been noted that the abdominal muscles are never in great rigidity in cardiac diseases.[5]

Myocardial infarction has in recent years been associated with epigastric pain with increasing frequency.[6,8,13,16,42] Persons dying of myocardial infarction and abdominal pain have ofttimes been diagnosed as death due to acute indigestion. Many such cases reveal the history that sometime before the infarction occurs, the patient has eaten large meals. The fact that he has eaten leads such unsuspecting physicians to diagnose the cause of death as "acute indigestion." Fortunately, in recent years this has not been as frequent as previously, in that many physicians now associate abdominal pain with that of myocardial infarction.

The first symptoms to appear are usually nausea and vomiting, followed by epigastric fullness, anorexia, and gaseous eructations. In such cases it would be wise to inquire as to previous cardiac symptoms such as dyspnea, cyanosis, edema, or substernal discomfort. Conversely, it is well recognized that gall-bladder disease can simulate coronary artery insufficiency in producing symptoms. Again it would be quite helpful to obtain a history of previous chills and fever, jaundice, clay-colored stools, changes in urine color, the radiation of the pain, and the effect nitrites have upon the pain. Pain in the precordium may be produced in persons, particularly past sixty, by distention of the stomach. Such a case of confusion is reported by Stanley Camp.[13] Myocardial infarction of such magnitude may be easily diagnosed if one remembers the changes which occur and the time interval in which they occur in relation to the pain, temperature, white blood count, erythrocyte sedimentation rate, blood pressure, and the electrocardiogram in the presence of a friction rub.

Congestive heart failure may produce symptoms referable to the gastrointestinal tract, notoriously those symptoms of nausea and vomiting. McMillan[33] states the most common causes for such symptoms in congestive failure are due to "drugs, visceral congestion, vitamin deficiencies, stimulation of the vomiting center by metabolites such as seen in uremia, the extensive myocardial damage as with myocarditis in acute rheumatic fever." Heart failure may also produce abdominal, usually epigastric, pain regardless of the cause of the heart failure.[8]

Among the diseases of the heart which may produce abdominal pain is rheumatic fever, since it may lead to coronary thrombosis or congestive failure, and it may *per se* cause abdominal pain.[4,16,21,23] Usually the abdominal pain of rheumatic fever precedes the joint manifestations by two or more days.[21] It has been postulated that the pain is due to ischemia of the visceral organs resulting from the well-known changes which may occur in rheumatic fever, but further study has revealed that the pain is not related to the pathological changes in the vessels.[3] Since rheumatic fever tends to attack structures of mesodermal origin, it is probable that a true peritonitis exists, explaining the pain. The tenderness of the abdomen in such cases is out of proportion to the general appearance of the patient; therefore, one finds more tenderness than expected before examination. With the attacks one rarely finds vomiting as a symptom. One may be able to diagnose rheumatic fever by the changes in the white count and Schilling hemogram, the sedimentation rate, the electrocardiogram, the presence of changing cardiac murmurs, changes in rhythm, tachycardia, fever, the presence of chorea, and the response to salicylates.

Generalized diseases of the vascular system may likewise produce abdominal pain. Dunphy[19] reports seven out of twelve patients dying of mesenteric vascular occlusion gave a history of chronic recurring abdominal pain before the fatal attack. In these patients the pain did not radiate, was not sharply localized, and was not associated with muscle spasm or abdominal tenderness. Such pain characteristics were compatible with the pain of rheumatic fever.

Serum sickness, presumably by causing generalized capillary changes, has been reported as a cause of acute abdominal pain simulating a surgical emergency.[18] In such cases a history of previous serum therapy would be helpful in establishing the diagnosis. The usual sequence of events is one of a rather sudden onset of vomiting, pallor, small pulse, and abdominal pain—in general, a "shock-like" picture. These symptoms are followed in twelve to fourteen hours by a generalized urticarial dermatitis. There may occur at this time bloody diarrhea, and it has been shown that the intestinal wall is swollen and edematous throughout, with serum exudation. The edema produces a stiffening of the bowel, hindering peristalsis. In like manner, Henoch's purpura may be considered as an anaphylactic vascular reaction

of the gastrointestinal tract, producing abdominal pain with bloody diarrhea.

Intestinal allergies have become an increasingly recognized cause of abdominal pain, especially in children.[37] Along with the pain may appear urticaria or purpura. The diagnosis can usually be made by family history or allergy, a past history of allergy in the patient, a previous history of a specific food allergy,[22] and a leukocytosis with eosinophilia, if present. A test allergic meal may be given, and conversely the pain disappears upon elimination of the offending allergen.

Periarteritis nodosa, a much rarer condition, may produce abdominal pain simulating pancreatitis, cholecystitis, nephritis, appendicitis, and many other conditions of surgical import. The diagnosis may be suspected in an individual who gives a history of previous serum therapy, sulfonamide therapy in the presence of streptococcal infections, a dermatitis of hemorrhagic or urticarial nature, leukocytosis and eosinophilia, and a remittent type fever. The diagnosis is established by a biopsy of an affected vessel.

A much rarer condition of the cardiovascular system causing abdominal pain is that of spontaneous rupture of the heart.[38] This condition occurs most frequently five to eight days following a myocardial infarction and occurs in the infarcted area, usually of the left ventricle.

Of the diseases of the respiratory system, pneumonia and pulmonary infarction are notorious. Many cases of lobar pneumonia have been recorded as having had epigastric pain simulating early appendicitis as the presenting symptom. Diseases other than pneumonia and infarction may produce epigastric pain, including pulmonary abscesses, gangrene, empyema, and carcinoma. The problem arises in the early differentiation of lobar pneumonia from appendicitis. One method of differentiation has been suggested using physical examination of abdominal and thoracic excursions. The same results were obtained in patients with pneumococcal peritonitis, nephrolithiasis, fracture of ilium, and traumatic rupture of the kidney and suprarenals. Further, restriction of the abdominal respiratory movements was absent in cases of lobar pneumonia even though abdominal tenderness and rigidity were present. Usually after the first twenty-four hours one has no difficulty in recognizing these distinct disease entities.

Certain diseases of the nervous system are prone to cause acute abdominal pain, among them epilepsy, tabes, spinal cord lesions, intercostal neuralgia, herpes zoster, psychoses, and emotional strain.[2,4,7,15,16,20,21,23,26,28,29,32,37]

In the diagnosis of spinal cord lesions, of prime importance is the neurological examination. This should include muscle power tests, pain and temperature distribution, touch disturbances, sweating reflex, and the gnostic test. With a complete neurological examination, intra-abdominal causes of abdominal pain may be ruled out.

Tabes is well known for its ability to produce abdominal pain in the nature of the so-called tabetic crisis. Such pain is supposedly due to envolvement of the lateral tracts of the cord. The pain in these patients is of an intolerable nature, being rather constant and requiring unusually large amounts of morphine for relief. In the diagnosis one should rely on the findings of the spinal fluid serology and the pupillary reflex. A positive history of lues five to twenty years previously should be very suggestive.

Epilepsy may cause severe abdominal pain which is sudden in onset and with an increase in peristaltic movements.[36] There is no associated nausea or vomiting. A certain group of epileptics may have such complaints as abdominal pain as the sole manifestation of their disease. A positive diagnosis could be entertained through the electroencephalogram.

Intercostal neuralgia is a complaint heard frequently from the laity, yet at times it may be confused with intra-abdominal pathology. Certain physical tests have been devised to differentiate the pain of visceral pathologic conditions from the pain due to intercostal neuralgia. Carnett[15] states that parietal tenderness is always found to persist on vigorous palpation made while the patient balloons out the abdominal wall, making it impossible for the examining fingers to come in contact with the abdominal viscera. Ninety-five per cent of hyperalgesia can be demonstrated by pinching a liberal fold of adbominal fat and skin.[15] To divide the tests further one may find the point of tenderness and then ask the patient to tense the abdominal musculature raising the fingers away from the abdominal viscera. If the pain is thus made worse or remains the same one may assume the etiology of the pain is extra-abdominally located.[32]

In passing, herpes zoster is worthy of short mention due to the problem of diagnosis. After prod-

romal symptoms of fever, malaise, and pain along the course of the nerve lasting three to four days, a vesicular eruption appears. The eruption follows closely the course of the nerves for that dermatome affected.

Psychoses and emotional strain account for many cases of abdominal pain. Such pain is bizarre, unusual, and indefinite, the patient being unable to describe it with accuracy. These patients may even have nausea and vomiting associated with the pain. Usually the episode of pain lasts only a few minutes without residual tenderness. The following is an excerpt from one of Lambert's[29] patients, a small girl:

"The father doll: 'I wish I had a boy instead of a girl.' 'Perhaps we can,' replied the mother doll. The child stepped out of character to remark, 'That's just like me: I have a step-daddy; I don't like to call him step-daddy, just daddy.' Then pointing to the father doll, the patient said, 'He beats the little girl because she spills some milk. She feels bad because he don't like her. She's scared and it makes her stomach hurt.' "

Many cases similar to the one above have been reported. The children becoming psychically frustrated have abdominal pain. Severe complications never develop from emotional causes of pain and there is no danger to life. "Such pain has no relation to the digestive cycle, or to defecation, menstruation, urination, or bodily exertion. The patient is completely well between spells. Such a person is likely to be nervous, worrisome, temperamental, and Jewish."[2]

Diseases of the blood which are generalized and do not affect the peritoneum directly may cause abdominal pain. Such diseases are those as Henoch's purpura, hemolytic icterus, and diseases in general leading to splenic enlargements. In a greater percentage of patients with hemolytic icterus there is a concomitant cholelithiasis which *per se* may cause the picture of an acute abdomen. This is not the explanation of abdominal pain, however, in all cases of hemolytic icterus. The abdominal pain occurs during the hemolytic crisis and may occur in diseases or conditions other than hemolytic icterus producing rapid hemolysis of erythrocytes. One laboratory examination which may rule hemolysis out or in as a cause of abdominal pain is that of the determination of free hemoglobin in the serum, which is elevated during hemolytic crises. There may be subsequent thromboses following sueh crises causing further pathology, but generally the pain is one of acute tissue anoxia.[14] Hemolytic icterus is usually diagnosed by the positive family history, splenomegaly, increased icterus index, increase in platelets, reticulocytes and white blood cells after a hemolytic crisis, and the abnormal fragility of the red cells to saline.

Sickle-cell anemia is a frequent cause of abdominal pain seen in the Negro race when no other cause is obvious. The pain may be generalized, unilateral, upper or lower abdominal in location. Vomiting may occur in such crises. Remissions and exacerbations is the natural history of the disease. The x-ray is helpful in establishing a diagnosis and reveals a furring, as of hair standing on end, of the outer cranial table. Smears made and subjected to carbon dioxide show the sickling. It has been stated that 7 to 10 per cent of all Negroes have an inherent tendency for sickling.[30]

Of the metabolic disorders, diabetic acidosis is probably a common cause in the production of abdominal pain. One can easily visualize the results of operating on a patient suspected of having appendicitis when in reality he has diabetic acidosis. Surgery in the diabetic presents itself as a problem notwithstanding surgery in the patient with diabetic acidosis. In diabetic coma one usually finds the vomiting has preceded the pain, whereas the reverse is true with an intra-abdominal pathologic condition.[41] With appropriate therapy in diabetic acidosis the abdominal pain of nonsurgical import clears, while that due to organic lesions progresses. In such patients the onset may be sudden with nausea, and vomiting followed by abdominal pain. Usually one finds a leukocytosis and a fever exceeding 99° F. The abdominal pain is supposedly caused by a hypochloremia, since a correction in the blood sugar and carbon dioxide combining power without a correction in the chlorides is not accompanied by a relief of the abdominal pain. Once diabetic acidosis is suspected, it is relatively simple to confirm such a suspicion with a urinalysis for sugar and acetone bodies, a high blood sugar, and a low carbon dioxide combining power. On acute emergencies with a known pathologic condition occurring concomitantly with diabetic acidosis, it has been said that operation should not be undertaken with a carbon dioxide combining power of less than 40 volumes per cent.

Of the direct opposite from diabetes is the condition of hypoglycemia which is able to produce

abdominal pain. In such conditions one must rely greatly upon the history of previous attacks and the association with meals. It is rather frequent to hear the story of abdominal pain or even precordial pain coming on at midnight after the patient has retired. Again one may obtain a history of such attacks of weakness, palpitation, tremors, sweating, and hunger after periods of physical exertion.[11] The diagnosis is obtained from the determination of a glucose tolerance test. Surgical procedures in such a patient with abdominal pain may be timely interrupted by the determination of a blood sugar at the instance when the patient has the pain.

Certain patients suffering from occult or marked hypothyroidism may have abdominal pain. The onset of the pain is usually related to meals in that it occurs several hours after meals. Such patients may show nervousness, irritability, insomnia, mental depression and instability, dry skin, falling hair, and pain in the epigastrium.[25] They may be mistakenly diagnosed as having peptic ulcer. The pain is not due to colonic states or constipation,[9] but may be explained on the poor absorptive ability of the gut due to the mucinous edema of this structure. The diagnosis may be obtained by finding a high blood cholesterol, a leukopenia, a low blood pressure, a low basal metabolic rate, and the therapeutic response to thyroxin.

Formerly, a frequent cause of abdominal pain in children was plumbism. The children would eat the lead point of the bed, ingesting sufficient amounts to produce symptoms of toxicity. Such symptoms are irritability, restlessness, fretfulness, nerve palsies, convulsions, nausea, vomiting, epigastric pain, and constipation. Abdominal pain and vomiting is found fairly frequently in children.[40] Such a condition may be diagnosed by a history of exposure, the symptoms of intoxication, basophilic stippling of the erythrocytes, and increased density of the bone shadows on x-ray examination.

Intracranial neoplasms may produce abdominal pain, most commonly those of the frontal lobe. The diagnosis of such a lesion is confirmed by a complete neurological examination, the history of psychic changes and/or epileptiform convulsions in the patients, studies on the cerebrospinal fluid, and ventriculographic studies.

A cause of abdominal pain being recognized more in recent years are the silent cerebral strokes of Alvarez. These occur most commonly in middle aged individuals and may be represented symptomatically by nausea, vomiting, and pain in the abdomen. Commonly such individuals are left with residual nervous system damage manifest by a hemiparesis, facial paresis, or paresis of one or more muscle groups.

In addition to the above causes of abdominal pain, others occur which bear mentioning. Carcinoma of the testes and prostate may produce a symptomatic acute abdomen.[27] Pressure over the prostate may produce the typical pain. This is particularly true in suppurative prostatitis.[39] A prostatic smear will reveal many pus cells in the latter instance.

In addition to those known causes there remain those causes for which no organic basis can be found.[24]

In view of the foregoing, it would appear wise for the surgeon to yield a diagnosis before he wields a knife in those patients presenting themselves with acute abdominal pain as the chief complaint.

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Acute Surgical Conditions of the Abdomen

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IN THE BELIEF that much of medical literature is repetition and that there is so much presented that lack of time demands that the subject be given in as few words as possible, a year ago I began a movement for the purpose of streamlining medical papers.

The subject of acute surgical conditions of the abdomen is one of such magnitude that books have been written on merely certain phases of it. Therefore, if I am to practice what I preach, this paper will only touch upon a few of the most important diagnostic and surgical problems.

Just recently the following unusual cases were presented at our clinic within the lapse of a few days.

A nine-year-old boy who had been kicked in the abdomen by a cow thirty-six hours before his admission was brought in from a distance of eighty miles. His physician had seen the boy shortly after he was hurt, but because the abdomen was soft and bore no external mark and because the youngster appeared to be in good condition, he failed to realize the seriousness of the condition. Actually, the boy had sustained a rupture of the jejunum, the bowel being nearly severed, and soon after admission to the hospital he died of shock and peritonitis. Yet I could not criticize this physician for his failure because I had made a similar mistake my first year in practice. In that instance a boy had been kicked in the abdomen during a football game. He, too, appeared to be in good condition on admission. His abdomen was soft, and there was no external mark. It happened at night, and I was already confronted with a patient with a strangulated hernia and one with perforated ulcer. The football player seemed the least seriously ill of the three. It was an unfortunate decision. The other patients might better have waited an hour or two because this boy died the following day of a ruptured jejunum. Yet that same morning he sat on the side of his bed smoking a cigarette and joking with his ward companions. His sense of well-being completely deceived one, as did the slight abdominal rigidity, which I wrongly attributed to voluntary muscle spasm and external trauma.

That was twenty-seven years ago, and this costly error in judgment, which I am afraid has happened to many others, taught me a lesson that has since saved numerous lives. How are we to correctly diagnose such cases in the presence of a soft abdomen, normal temperature and blood count, and the absence of shock or any visible external marking within a few hours of the onset? Experience and judgment alone must be our guide. If your patient is in a farmhouse or a small town lacking proper hospital facilities and experienced consultants, transport him as speedily and gently as possible to a good hospital. Do not give him morphine and mask the picture unless you think he has an acute surgical condition of the abdomen and must be operated upon at once.

I believe that the community in which I live is as enlightened medically as most any section of the country, yet my medical experience has been studded with unfortunate disasters because, in an effort to relieve pain, some well-meaning physician has administered morphine, confusing the diagnosis until the critical nature of the condition became apparent. I have seen the patient with a perforated ulcer who is relieved of pain only to die of peritonitis, the patient with a ruptured spleen or liver who is relieved of apprehension temporarily and later dies in shock and hemorrhage, and the child with a retrocecal appendix deep in the abdomen, who, because of the soft belly, normal temperature, and normal blood count, is given a sedative and a laxative, and dies a few days later of peritonitis.

To return to the boy whose death resulted from a cow's kick which ruptured the jejunum, I believe there is only one rule we can follow in such traumatic lesions, namely, when in doubt, *operate*. A negative exploration will do little or no harm, and it may prove life saving. With the aid of antibiotics and good surgery, few such patients should die if operated upon within the first few hours, but every hour's delay adds to the risk.

The same night this boy was admitted I was called to see a fifty-year-old man who was sitting upright in bed complaining of severe abdominal pain. He had every appearance of an acute perforated ulcer. He was unable to lie down; he was perspiring and suffering; and even the x-ray plate showed a suspicious area suggesting a gas

From the Jackson Clinic, Madison, Wisconsin.
Presented at the eighty-fourth annual session of the Michigan State Medical Society at Grand Rapids, September 23, 1949.

bubble under the left diaphragm. Yet he did not have a perforated ulcer, and I was fairly sure of my diagnosis. Do you know why? In eliciting his history—and it is most important that a careful history be taken in these cases—the fact was brought out that the onset of the pain was gradual and not *gunshot* in character. If I recall correctly, every patient with perforated ulcer whom I have seen had this history of a sudden severe pain. Often it comes when the stomach is empty and after drinking cold beer. Only about 70 per cent of the patients give a previous ulcer history. Boardlike rigidity developing an hour or two after onset is typical. When this man's attention was directed from his trouble, his abdomen relaxed; in patients with perforated ulcer this does not happen. The temperature and blood count rise only as peritonitis begins to develop. Do not delay in getting these patients to the operating table, for minutes are valuable and hours may mean life or death. A few interrupted chromic sutures will close the perforation; a tag of omentum over the sutures will help; penicillin, sulfonamides, and streptomycin will combat infection. As with all my surgical cases I have the patient out of bed the day of operation and, if possible, walking the day after. Long an early ambulation enthusiast, I believe this is the best way to combat such conditions as ileus, atelectasis, pneumonia, embolism, and wound disruption. Venoclysis and careful attention to maintenance of the proper electrolytic balance, as so often advocated by your own eminent Fred Collyer, are all important. I have had no experience with the nonsurgical treatment of these cases now being tried at Johns Hopkins and elsewhere. Unless the patient is in the late stages of peritonitis, I prefer closure of the perforation and nondrainage. As it turned out, this patient did not have a perforated ulcer but was suffering from acute gastritis.

A few days later I was asked to hurry to the emergency department for consultation. The patient, a middle-aged man, said that ten days before, while walking through his barn, he struck his side against the sharp edge of a box. He was driven thirty miles to the clinic, his chest was x-rayed and strapped, and he was then allowed to go home. After a week he removed the tape and on this day brought his daughter to the clinic. While sitting in the car awaiting her, he sneezed and felt a sharp pain on his left side. He walked into the clinic, sat down, and was soon observed by a nurse, who noted that he looked pale and took him to the emergency department. On seeing the man, I found that his pulse was 50 and his blood pressure normal. His abdomen showed slight voluntary rigidity but no area of tenderness. At this time he laughed and talked with me and seemed in no obvious distress. He was taken to the x-ray department to have a flat plate of the abdomen, and from there I was called and told that he "nearly passed out on the way." However, when I arrived, his condition appeared excellent, and the x-ray plate was negative. Two hours later I removed a ruptured spleen. This was an unusual case of delayed hemorrhage following external trauma. Nature temporarily took care of the torn spleen, which was opened up by his sneezing and every time he was put in a certain position. A falling blood pressure and a rising weakened pulse called for immediate exploration, and our assumption that he had sustained a ruptured spleen or liver proved correct.

I could go on indefinitely citing interesting cases such as these to illustrate the various problems found in acute surgical conditions of the abdomen. All of you, I am sure, have had many similar problems to solve, but we must hasten on to mention briefly some of the other twenty or more lesions that test our diagnostic acumen.

First, let us not overlook the purely medical diseases that may mimic surgical lesions.

The onset of pneumonia in children may occasionally cause abdominal complaints that simulate appendicitis. In acute pyelitis there may be elevation of the temperature and the white blood count and, at first, negative urinary findings. True, the tenderness is usually in the lumbar region. In appendicitis, too, there may be little tenderness and rigidity, a normal blood count, and even blood cells and pus in the urine to still further confuse the differential diagnosis. Coronary disease may resemble acute cholecystitis and vice versa; not infrequently they may occur together. Abdominal allergic conditions and abdominal apoplexy may be puzzling.

Acute pancreatitis is considered by some as a surgical condition and by others as a medical disease. Recently one of my colleagues and I operated upon two patients with acute gangrenous hemorrhagic pancreatitis, and both recovered. I cannot see how these critically ill patients would have survived without surgical intervention. Yet, Doctors Ochsner and Gage told me recently that

they had successfully treated over forty cases of acute pancreatitis by lumbar sympathectomy block. The diagnosis of these cases is often not as simple as the textbook description of high fever, severe epigastric pain, leukocytosis, shock, and positive blood amylase findings. Most of the patients I have operated upon seemed to have conditions so closely resembling cholecystitis that exploration was deemed advisable, and with the aid of antibiotics I believe the mortality has been greatly reduced.

In acute cholecystitis one expects to find the signs confined to the right upper quadrant with the pain often referred to the right costal margin and infrascapular area. The diagnosis is usually not difficult, although at times the possibility of a high-lying appendix may be confusing. The main point of discussion in this condition is when to operate. One school of thought favors early cholecystectomy and the other delayed surgery. I believe there can be no fixed rule, and the same applies to removal or just drainage of the gall bladder. It is better to have a live patient than a perfect operation and a fatality. Consequently, in the elderly, the debilitated, or in the presence of severe toxemia, cholecystostomy may be preferable to cholecystectomy.

Acute intestinal obstruction still remains the cause of high mortality, despite advancement in anesthesia, technique, and chemotherapy. Too often diagnosis is delayed too long because of a normal temperature and blood count and absence of fecal vomiting and of severe distress. In the past the mortality has been as high as 50 per cent in the best hospitals, but improved methods of preoperative and postoperative care, earlier recognition and operation, and the use of oxygen and penicillin have greatly lowered mortality. Intussusception, volvulus, adhesions, strangulated hernia, and malignant growths all take their toll. High obstruction with the history of cramping pains, vomiting becoming fecal in the late stages, visible peristalsis, distended abdomen, obstipation, and the characteristic stepladder appearance of the flat x-ray plate are all typical. Always examine the abdomen for an operative scar that may disclose the cause of adhesive bands. If in doubt, do not delay an exploration. Obstruction in the large bowel is more gradual in onset, especially if due to malignancy, and is not as quickly detected. The Miller-Abbott tube, hot stupes, enemas, and venoclysis may temporarily relieve a partial obstruction of the large bowel and improve the patient's condition for operation. The patient usually recovers from an operation unless it has been too long delayed. In acute intestinal obstruction I prefer to be as conservative as possible and seldom resect the bowel. Early ambulation and duodenal suction, with careful attention to the electrolytic balance, and oxygen are helpful.

Mesenteric thrombosis may present the typical picture of auricular fibrillation, bloody rectal discharge, abdominal distress, and doughy abdomen. Often as not the characteristic textbook picture is not seen, but there is no mistaking the diagnosis when the peritoneum is opened, and the only recourse is to resect the gangrenous intestine, start heparin and dicumarol, and pray. Usually it does no good, but rarely a patient may survive.

Among the numerous conditions for which appendectomy has been performed in the absence of appendicitis is a lesion involving almost any segment of the small or large intestine and first described by Krohn and his associates in 1932. This condition they termed terminal ileitis, but now it is generally called regional enteritis. It is a baffling disease of unknown etiology, whose cure likewise remains a mystery. Probably no subject in surgery was given more space in the national and state medical journals during the ten years following this report. In 1936 I brought the cases in the literature up to date and collected sixty-four additional cases from members of the Western Surgical Association, including four of my own, making a total of 182 cases. This report appeared in *Surgery, Gynecology, and Obstetrics* and was illustrated by a colored plate showing the typical, edematous, thickened appearance of the diseased bowel and the greatly enlarged glands. Since that report, many hundreds of additional cases have been added to the literature. Some authors have favored resection, others prefer sidetracking the diseased area, and still others have opposed surgery in any form. In brief, this condition may in its early stages simulate acute appendicitis, later on acute ulcerative colitis, then intestinal obstruction, and in the last stage multiple fistula between loops of intestine or the bladder may occur.

Congenital anomalies of the abdomen form an entire chapter in themselves, and in my experience there have been cases of hemorrhage, perforation, and strangulation from but one of these, Meckel's diverticulum. My associate, Dr. George Schwei, and I have recently completed a study of thirty-

eight such cases.* Time does not suffice to permit a further discussion of this subject, other than to say that this lesion is not an unusual cause of acute intestinal hemorrhage.

There are numerous other abdominal conditions that call for immediate surgery, and among those conditions in which I have operated have been three cases of torsion of the omentum, and one of almost fatal hemorrhage from a leiomyoma of the ileum. One must always bear in mind, too, the large group of pelvic lesions, ruptured ectopic pregnancy, and torsion of or rupture of an ovarian cyst. Then, too, the various inflammatory lesions must be ruled out, but these conditions are not within the scope of this paper.

There remains time to mention but briefly the most important of all acute lesions of the abdomen. In 1938 I wrote a paper entitled "Half a Million Deaths from Appendictis," the object of which was to stress the appalling and increasing death rate from this disease. Many more of our finest young men and women have died since publication of this paper, but with the advent of the sulfonamides in 1941 and with the later introduction of penicillin and streptomycin the death rate has rapidly decreased from three every hour, or 17,000 a year, to probably less than 5,000 this year. That figure is still far too high. Unfortunately this disease may prove to be the most baffling, from a diagnostic standpoint, of acute abdominal conditions; and to reiterate, despite a normal temperature and blood count and a soft abdomen with tenderness only on deep palpation, operate if you think it is a case of appendicitis. Since 1941 in perforated appendicitis with peritonitis I have used sulfathiazole intraperitoneally, and, more recently, penicillin and streptomycin, no drainage, and early ambulation, with recovery in all cases and without wound infection. These measures have been a great forward step, not only in eliminating mortality and complications, but also in reducing hospital stay and convalescence.

This, in brief, is a streamlined presentation of the more important acute surgical conditions of the abdomen, adequate treatment of which would require one or more volumes.

MSMS

It costs the Government from $22,000 to $55,000 per bed to build hospitals. The Civilian cost is about $16,000 for the same kind of bed.—*Hoover Commission Report.*

*In press, *American Journal of Surgery.*

Recto-urethral Fistula

By J. F. Wenzel, M.D., and E. A. Jenkins, M.D.
Detroit, Michigan

THE REPAIR of simple anocutaneous fistula by the excision of tract and overlying tissue, without suture, allows healing by second intention, without recurrence.

Recto-urethral fistula, with both urine and feces forced into the tract, has a high recurrence rate following surgical excision. The overlying tissue cannot be removed to permit healing by granulation. Recurrence is due to contamination of the operative site by urine or feces after the tract has been removed. Healing by second intention can be obtained by keeping the operative site free from either urine or feces. The wound cannot be considered sterile, and reliance cannot be placed on healing by first intention.

In 1913 in the Transactions of the American Association of Genito-Urinary Surgeons, Young and Stone described a modified pull-through procedure, utilizing only the rectal mucosa, to divert the fecal stream beyond the area of repair, thus avoiding temporary colostomy. Antecedent suprapubic drainage of the bladder diverted the urinary stream from the operative site. The diversion of the fecal stream and diversion of the urinary stream remain basically fundamental in the surgical repair of recto-urethral fistula.

Case Report

On January 5, 1948, C. R., an eight-year-old boy was admitted to St. Mary's Hospital in Detroit with a history of having been born with an absent anus, which was corrected immediately by suture of the blind rectal pouch to the perineum. Since that time urine passed through the rectum, and feces and gass passed through the urethra. The anus was always painful and a diaper always necessary. Constipation was severe.

Intravenous pyelography revealed compression of the bladder by bowel dilated with feces sufficient to be consistent with a diagnosis of megacolon; there was no evidence of fistula connecting the bladder and bowel (Fig. 1). Methylene blue injected through a catheter into the bladder did not appear in the rectum. Peroxide injected through the urethral meatus appeared in the rectum 2 cm. above the anocutaneous junction. A catheter was then passed into the urethra through the fistula into the rectum and out the anus (Fig. 2). The urinary opening was thus established at or distal to the external urinary sphincter.

Presented before the Philadelphia Proctologic Society, March 16, 1949.

Fig. 1. Intravenous pyelogram revealing bladder compression and hydro-ureter resulting from impacted feces; no fistula exists between bladder and bowel.

Fig. 2. Recto-urethral fistula. Catheter passed into urethra, through fistula into rectum, and out of anus.

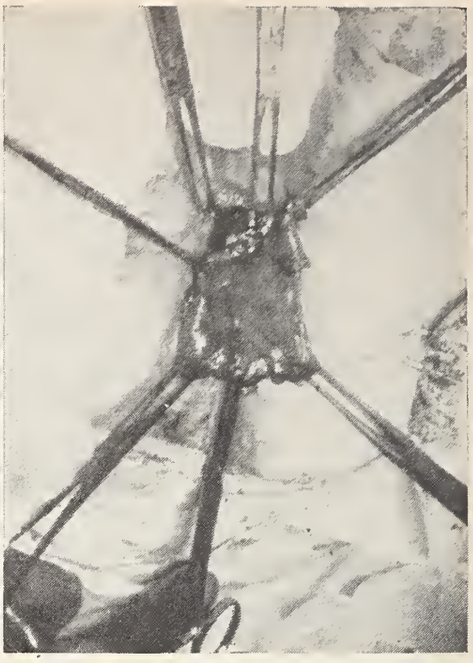

Fig. 3. Mobilized rectum pulled through anus, transplanting fistulous opening beyond skin line.

After bowel preparation the patient was taken to the operating room on January 20, 1948. No colostomy was used. Suprapubic cystostomy was performed to divert the urinary stream; urethral drainage with a Foley catheter was established to supplement urinary diversion and to aid in the urethral dissection. A collar incision was made at the anorectal junction, and the rectal wall, including all layers, was mobilized by sharp dissection up to the peritoneal reflection. The mobilized rectum was retracted and the fistulous tract excised. The urethral lining was freshened and the wound closed with No. 00 chromic catgut. The mobilized rectum was pulled through the anus, transplanting the fistulous opening to the outside, and the redundancy excised (Fig. 3).

Urinary drainage was continued for two weeks. Cystoscopy every two months for over one year revealed no stricture and no recurrence of fistula. The urinary stream was forceful and there was no incontinence. Anoplasty for anal stricture was done six months later, resulting in adequate bowel regulation and control.

Conclusion

By diversion of both fecal and urinary streams, surgical repair of recto-urethral fistula can be converted to the principles of healing by second intention, as in simple anocutaneous fistula.

MSMS

EFFICIENT?

The Metropolitan Life Insurance Company and the Federal Government both are in the insurance business. It takes four times as many employes in the Federal Government to process a given number of claims as it does the Metropolitan Life Insurance Company.—*Hoover Commission Report.*

CANCER CONTROL

(Continued from Page 20)

cancer incidence and prevalence are still most inadequate, cancer reporting is being rapidly extended to all states. Official public health agencies are appreciating that cancer is a public health problem and are making its control a part of their regular duties.

An increasing number of cancer patients now receive treatment in earlier stages of their disease. This increases the number and percentage of five-year cures which, in turn, creates a greater optimism in both lay and professional minds.

Cancer research has been extended into all phases of the cancer problem. More than 200 research projects are now focussed on the problem of growth. Studies in physics, chemistry and related sciences are being pursued. Clinical studies on diagnosis, treatment and care of cancer patients are being conducted. Tissue culture methods now provide adequate quantities of cancer tissue for study and large numbers of genetically homogeneous laboratory animals, principally mice, are providing material for important cancer studies. A never-ending search for the cause, cure and control of cancer will continue to shed light on this problem that has baffled the scientific world from the dawn of history. There is much cause for optimism in ultimately understanding and controlling this disease.

Mental Illness

Administrative, Preventive and Therapeutic Considerations

By Alfred E. Eyres, M.D.
Detroit, Michigan

MENTAL ILLNESS is grim and serious. There are eight million[20] of us who are seriously psychoneurotic and three million who are chronically alcoholic. One in fifty will commit suicide and one in fifteen will be committed to a mental hospital. Ten years ago Halliday[12,13] first called attention to the rising incidence of emotional illness. The tremendous numbers of rejections by selective service boards in World War II and the great numbers of neuropsychiatric casualties should certainly give cause for concern and reason for action. The majority of patients seen by physicians have no demonstrative tissue pathology but are ill because of emotional stress and strain.

The student of medicine today is confronted with a panorama quite different from that of his predecessors. The health officer, a specialist in preventive medicine, is aware of the fact that such illnesses as typhoid, pneumonia, smallpox, diphtheria and scarlet fever are largely controlled or eliminated. Preventive medicine will continue its inroads in the direction of the infectious diseases. As we become a nation of older people, we must pause and consider that which Boas[3] has called the Unseen Plague, Chronic Disease. What is the unseen plague and of what does it consist? There are nervous and mental illness, rheumatic disease, accidents, allergy, and cardiovascular-renal disease, of which essential hypertension alone outweighs cancer in importance.[16,28] According to the statistics of the Metropolitan Life Insurance Company,[5] every other individual past the age of fifty years dies of cardiovascular-renal disease. The most singularly important fact here is that emotional factors very often play an important part.[21,24] Fleming[10] and Halliday[14,15] have called attention to the magnitude of the accident and illness habit and its association with the emotional component. The figures and estimates of the National Safety Council[25] are stifling and almost beyond understanding. The 1941 accident rate, averaging one death or disabling injury for every four families, took a larger toll than the army. In 1941 four million workers were killed or seriously injured, and nearly one half billion man-days, sufficient production labor to have probably doubled the United States Fleet, were lost. Against the gargantuan problems of crime, costing fifteen billions of dollars yearly, juvenile delinquency, divorce, relief and the dole, the potentialities of preventive mental medicine may have some of the answers.

Another important consideration that Dunbar[6] has pointed out is that many patients discharged by qualified physicians from our best hospitals, as having no sign of demonstrable organic disease, remain sick and later drift to the quack, the charlatan, or return later with a recognizable organic disease which earlier symptoms suggested. The challenge is overwhelming and the stakes are enormous. We must cope with the problem of mental illness. Plans for so doing demand that all available resources be carefully integrated and placed at work if results are to be achieved.

Community Organization for Administration

Many of our people, physicians included, are not sufficiently cognizant that mental illness is, in terms of prognosis, not unlike other diseases, say—pulmonary tuberculosis, appendicitis or syphilis. By this, it is meant that in mental illness, as in other illness, the patient is much more apt to get well when very early treatment is instigated.

There are many who believe that the most ideal way to see emotional illness early is to see it in the general hospital. Heldt,[17,18] Sandy,[27] Menninger,[22] Billings[2] and a host of others have written extensively in this regard. The psychiatric general hospital movement undoubtedly will develop extensively, and from a social and an economic standpoint it must. As a result, the early study, diagnosis and treatment of the patient with emotional or psychosomatic illness will constitute a powerful prophylactic against the development of more severe disorder, and many patients will be spared state hospital commitments.

Many of the psychoses may be treated and recovery gained in the general hospital. The alcoholic psychoses, especially delirium tremens, constituting about 10 per cent of admissions to state hospitals, and the syphilitic psychoses, constituting another 5 to 10 per cent, are examples. The depressions, the involutional psychoses, the acute anxiety states and certain other entities may be treated in the general hospital. Psychotherapy,

physiotherapy, fever therapy, hydrotherapy, chemotherapy, insulin and electro-shock therapy, psychosurgery, recreational and occupational therapy constitute powerful and effective therapy measures in the treatment of these diseases, and they may readily be given in the general hospital.

There is urgent need for community mental hygiene clinics and child guidance clinics. Here is preventive medicine and preventive psychiatry in its most fruitful and efficient form. Indeed, our tardiness in placing at work the forces of preventive mental medicine is a tragic chapter in medical history.

The State Hospital

The state hospital of today is largely concerned with providing custodial care for patients. The state hospital of tomorrow should instigate an aggressive therapeutic program for the benefit of all patients. There are several prerequisites necessary if such a program is to be pursued. The legislature must appropriate ample funds; modern physical facilities must be forthcoming, trained personnel employed, and in certain hospitals facilities for the training of personnel must be organized.

Selection and Training of Personnel

The selection and training of personnel for psychiatric work is of paramount importance. Having a place in carefully organized and integrated training are administrators, physicians, nurses, dentists, psychologists, social workers, clergymen, occupational therapists, attendants and certain other employes in housekeeping and industry.

Any person electing to go into psychiatric work should have an interest in people and in emotional illness. More especially, nurses and attendants should be more carefully selected in the future. This is necessary because the patient spends the major portion of his time in the company of the nurse and the attendant. Careful investigation of the applicant, aptitude tests and interview by a psychiatrist are indicated.

Special courses of study should be given the attendant and other hospital employes who have contact with the patients.[4] The nurse should have, as an integrated part of her training, a six months' affiliation in an approved mental hospital either public or private.

In 1945 Menninger[23] estimated that only about 200 young physicians were receiving formal psychiatric training. As the military situation has permitted, increasing numbers of physicians have sought training. In addition to previously approved facilities for training, the reorganized Veterans' Administration is now providing training for physicians and the veteran is receiving sorely needed therapy. The classical treatise of Aring and Bateman,[1] "Nurturing a National Neurosis," which appeared in a 1937 issue of *The Journal of the American Medical Association* affirms the veteran's need for psychiatric therapy.

There is not yet complete agreement over what constitutes adequate training for the psychiatrist. It is nevertheless evident that present state hospital training is quite inadequate and needs to be supplemented. There exists, at present, a definite paucity of physicians in state hospitals. This may well be due to the fact that the state hospital must now compete with University Hospitals and general hospitals in the securing of trainees. Psychiatric training at its zenith certainly must make provision for clinical work other than with psychoses alone. Without an understanding of neuroses, child guidance work and psychosomatics there exists a vacuum in any training program. It becomes increasingly evident that psychoanalytic training is of sufficient importance that provision, at least from standpoint of time, must be made for those desiring such training. It is the opinion of English and Pearson[7] and a host of others that the more severe neuroses can be cured permanently only by psychoanalytic treatment.

Problems of Personnel and Morale in Employes and Trainees

Institutions and training centers, without exception, must deal with the ever present personnel and morale problem. The student of political science well knows that in the Supreme Court of the United States the personal element is not eliminated.

Capacity for action and degree of efficiency are perhaps more dependent on esprit de corps than any other single factor. The allocation of authority to departmental and divisional chiefs by the administrator is all important in good administration. By the same token, if there is definite cleavage between policy and administration, as there should be, the divisional and departmental heads are responsible and accountable to the administrator for their work.

The best of administration can be scuttled by vacillation, indifference, internal dissension, insubordination and disloyalty. Much has been written regarding morale and ways and means of maintaining it. Employes and trainees should have knowledge of purposes and objectives and they should be made constantly aware of the worthwhileness of their work. The confidence of the rank and file in the integrity and good intent of superiors is necessary. General personnel problems carefully and fairly handled will do much to enhance morale. Meriting mention are: equal compensation for equal rank; promotions on basis of merit and efficiency; equal opportunity of assignment to and rotation on various services, especially in reference to physicians and nurses; liberal policy on time-off, vacations, leaves, transfers, and, for the permanent employe, a satisfactory retirement system.

Good and effective leadership can build morale by effort in other directions. Cheerful and comfortable living quarters and the provision of good food pay immeasurable dividends. The trained nutritionist is the first prerequisite for balanced diet and palatable food. There are all together too many hospitals operating without the services of a nutritionist, and, moreover, diet is equally important for employe, trainee and patient. In the instance of trainees, the majority of whom are yet in formative years, it is an inexcusable indictment against a hospital and a municipality or a state if adequate diet is not provided. Prepared under the direction of a nutritionist, seasoned and cooked by a skilled and painstaking chef, could there be anything more delicious and nutritious than a beef stew? A diet that is palatable and balanced is indeed one of the paramount aspects of sound medical and administrative practice.

The employes and trainees should have access to modern recreational facilities. It is possible for employes to use most of the same facilities that should be provided for patients. A gymnasium for year-round use makes possible diversified activities such as softball, basketball, volleyball, handball, badminton, bowling, dancing and swimming.

Many general and psychiatric hospitals make provision for care and treatment of physical illness in employes. However, seldom is anything done for the employe in need of psychiatric guidance. Because emotional illness is of much higher incidence than physical illness, cognizance should be taken in regard to this problem. The psychosomatic illness and the psychoneuroses often respond quickly and readily to treatment. One of the first symptoms in emotional illness may be an impairment of working efficiency. Intelligent medical and hospital practice would be consummated if the employe were given reassurance and assistance in the solution of his conflicts.

The physician, in most institutions, is usually called upon for twenty-four-hour duty several times per week. This practice should be discontinued. In its place there should ensue a planned duty schedule, whereby for a given period of perhaps ten days, or two weeks, one physician would assume complete night house coverage and be free from daytime duty. The physician who pursues intensive academic and clinical daytime work, can be at his highest degree of efficiency only when his rest is regular, and it almost never is when twenty-four-hour coverage is imposed upon him.

The success or failure of treatment in any hospital is dependent upon the physician's leadership. If the state hospital hopes to carry on successful treatment and to train personnel effectively, which at its best is slow and tedious, it must attract and hold physicians of high caliber, by upward revision of salaries. Pay scales of other employes likewise should be increased. Security and tenure of position spell immunity against the ruthless politician and contribute to sound morale. Without a high degree of autonomy neither a department nor mental health nor a state hospital can do its best work. In security and tenure of position, Massachusetts has made progress. The law requires that the commissioner and the assistant commissioner of mental health and the superintendents of the State Hospitals be diplomates of the American Board of Psychiatry and Neurology.

Physical Facilities

The efficiency factor of any hospital is in considerable measure dependent upon the quality and arrangement of buildings and grounds, and upon other essential equipment and capital outlay.

Because of extensive research in architectural engineering, materials and working plans, the new psychiatric hospital can be constructed with operating efficiency as its highest goal. The remodeling of older units entailing definite limitations is nevertheless often desirable and feasible.

Bricks and mortar are important, but there is

yet much to be attained. What are some of the more important and necessary physical facilities for a modern psychiatric hospital? For the treatment and care of patients: modern equipment for surgical, obstetrical and medical care, including geriatric care; clinical laboratories; x-ray, including the miniature type; apparatus for physiotherapy, fevertherapy, hydrotherapy, and shock therapy; miscellaneous equipment for research work; dental office and laboratory; extensive recreational and occupational therapy and outlay; modern equipment concerned with functions of housekeeping.

There are few, if any, mental hospitals that can afford to operate without continuous intermittent sanitary surveys, conducted by a qualified sanitary engineer. Sanitary science is highly technical, has extensive ramifications, and too little attention is paid to it. Mental hospitals are powder kegs of dysentery, typhoid and other foodborne infections.

Treatment and Care of Patients

The fulcrum of therapy is occupied by the physician. If more than custodial care is to be given mental patients, there must take place in the psychiatric hospital a general increase in the physician per patient ratio. Individual treatment through the psychotherapeutic approach has many profound ramifications for which there is neither counterpart nor substitute. Group therapy procedures are next in importance and effectiveness.[9,11] They certainly will be used more in the future.

The insulin and electric shock therapies have their place.[19] Electro-shock therapy is specific for some of the involutional psychoses and many of the depressions. The insulin method is often preferable in the schizophrenias. Not a panacea for mental illness, shock treatment is very effectively employed as a rapid means of making a psychotic patient accessible to individual or group therapy. Future research in the basic sciences may be expected to supply additional answers to many questions obscured in the enigma of mental illness. Narco-synthesis, having many limitations, has been used by civilian and military neuropsychiatrists, with good results.

The educator might say, "All work and no play makes Jack a dull boy." The financier and the economist counter by stating, "All work and no play makes jack." The psychiatrist, on the other hand, believes, "All work and no play raises hell with Jack." The profitable expenditure of spare time in pursuit of hobbies and recreation if learned at all must be learned early. As English and Pearson[8] have clearly brought out, middle age and retirement problems require that we plan and prepare in advance. Recreational therapy at times is productive of results when other measures fail. In the neuroses an early and fundamental symptom is the impairment of capacity for work, whereas in the psychoses, there is severe impairment of working capacity. Many a patient has sustained an acute mental breakdown as a result of emotional conflict and increased work and responsibility. Therefore, is it surprising that the patient who is mentally sick cannot at first interest himself in work when he feels that it has been a factor in precipitating his breakdown? Active recreation may include a wide variety of any of the sports.

The patient who is in mental turmoil often needs the private counsel of a clergyman or chaplain who is able to give comfort and reassurance for the soul. Most clergymen are interested in mental illness, but their comprehension of it is meager. The psychiatric training center could well consider giving training to undergraduate clergyman. Such a plan would envisage an arrangement with the seminary whereby young clergymen would spend several months on an in-hospital basis at the training center. Thus the clergyman, alert to the symptoms of mental illness, would become invaluable to his community and to his parishoners. We must remember, however, that religious assurances alone constitute suppressive and not expressive therapy. It may be said that the help and assistance which the clergyman can give are largely determined by his comprehension of mental illness.

The skilled psychiatric social worker has established herself as an indispensable link in complex treatment and rehabilitation of the psychiatric patient. We must train as quickly as possible a great many more of them. The skill and judgment of the psychiatric social worker, in counsel with the psychiatrist, is a determining factor, first, in the placement of the patient back into the community, and second, in the supervision of his continuing adjustment.

It is a fact that in physical illness emotional factors are very often neglected, and the converse is also true—that in mental illness, physical disease

is overlooked or neglected. The infectious diseases, syphilis and tuberculosis are vulnerable for attack. Many mental hospitals are teeming with pulmonary tuberculosis. Every patient admitted to a general or a mental hospital should have a Wassermann blood test and a chest x-ray. The patient having far-advanced pulmonary tuberculosis, with little chance of recovery, may be isolated, while the patient with a minimal lesion can be treated and cured. Doubtful cases, registered in a tickler file system, should be kept under continuous scrutiny and again x-rayed at short intervals.

The responsibility of the general and the psychiatric hospital does not end with the diagnosis and reporting of tuberculosis and syphilis. Outside contacts, direct and indirect, should be investigated. At this point, progressive state departments of health will be eager to be of service. The tracing of infectious disease contacts, especially syphilis, is highly technical work. The utmost in patience, tact, perseverance and skill is brought into play by the trained epidemiologist and his co-workers. The field work is usually done by the public health nurse, trained in epidemiological procedure. Follow-up work in syphilis and tuberculosis is imperative and fruitful because of the number of positive contacts frequently discovered. It is not uncommon to find more than a score of positive contacts traceable from a single case of syphilis. Likewise in tuberculosis investigation, the epidemiologist is never satisfied until he has determined from whom the patient received his infection and to whom he may have given it.

Research in Psychiatry

Had it not been for the efforts of Lister, Banting and Best, Freud, Cushing and many others, medicine would not be what it is today. Psychiatry has been designated as the oldest art and the newest science in medicine. Make no mistake, no specialty embraces a greater potential, and none offers a greater stake, than does psychiatry, within the entire field of medicine.

Psychiatry as a field for medical research is without equal. Psychosomatics are rich and inviting. The old age psychoses are challenging and their apparent increase demands investigation and research. Countless other psychiatric entities beckon the research investigator. Success in psychiatric research, as in other endeavor, is dependent upon sufficient finance, physical facilities and the mobilization of brains. Legislators must realize that with the decline of private philanthropy the financial burden of research must be borne by the taxpayer.

Summary and Conclusions

A presentation of the most pressing public health problem of our time has been set forth and effective measures necessary for solution have been described. Out of the present state of flux, and as result of research, there will emerge other methods of treatment for the mentally ill. Medicine in general and psychiatry in particular are anything but static. Mental illness is preventable and curable, and that which can be accomplished is infinite.

Federal, state and local health agencies are intensely interested in mental health and they are in a unique position to render service through health educational methods and field work. The time is not far removed when preventive mental medicine will become the most important phase of school health work.

It is the sole responsibility of the medical profession to provide sorely needed leadership in the campaign against mental illness. Present medical men, trained in the organic tradition of medicine, the "either-or" concept, are slow to recognize and accept the psychic component in medicine. It is high time that we begin to train the medical student away from the "either-or" concept and toward the "both-and" concept.

The significant experiences of Weiss and English,[29] with medical students in Philadelphia, set forth in their textbook "Psychosomatic Medicine," should compel our medical schools to take cognizance. To the Long Island College of Medicine goes credit for the first Department of Psychosomatic Medicine to be established in a medical school.

There will probably be many who will read this paper and conclude that a psychiatric program, such as the one outlined, while desirable and productive of results, is economically prohibitive. Is the taxpayer not already overburdened? Without giving careful cognizance, they answer in the affirmative. Granted, the burden of the taxpayer is heavy, and, unfortunately, taxation levies will not return to the level of the pre-industrial revolution era. Indeed, taxes must needs increase in proportion to the complexity of modern civilization. The inescapable truth is, that in one way

or another, the taxpayer, regardless of his wishes, must and will pay the costs dictated by mental illness. Of the taxpayer's dollar, the Commonwealth of Massachusetts now expends more than seventeen cents for the care of its mentally ill and this amount is insufficient. John Citizen is emerging from the citadel of rugged American individualism and he is determined to enter into a new era. He is eager to improve upon his physical and mental health. He believes that financial costs and other important considerations outweighing economics can best be solved by meeting the situation squarely, because in the end, good treatment will be the least expensive.

Thomas Parran,[26] in his authoritative book on syphilis, "Shadow on the Land," cited a most interesting personal experience. The Surgeon General of the United States Public Health Service, when in a large midwest city, chanced to observe an acquaintance afflicted with syphilis of the central nervous system. This man, enclosed in a fever therapy cabinet, was described as anything but comfortable. Dr. Parran commented that, ironically, here was a prominent man of comfortable economic means, well known to him, who had vehemently opposed the passage of the Social Security Act and its public health provisions. Many a taxpayer unconsciously entertaining the philosophy, "it can't happen here," has sustained mental illness. Where or whom mental illness will strike next, no man can say. It may be stated forcefully that the attitude of many has been softened because the catastrophe of mental illness has struck either family or friend.

It is doubtful that there is any psychiatrist who in his state hospital experience has had no alternative other than to explain to an anxious relative that Betty's illness is probably hopeless. It will not make this relative feel easier if the physician further reiterates that had Betty been given earlier specific treatment, her illness might have been prevented, arrested or cured.

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PRESIDENT'S ADDRESS

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constructive ideas to defend America against the expected renewal of pressure to create in our country the welfare state.

Times have changed. We are living in a world of flux. Our United States is not now a country of isolation, but has been precipitated into world affairs. It must assume and it is assuming the leadership of the world in nearly every field of endeavor. Just so, the medical profession of this country must assume its role of leadership, both in the scientific and in the attendant economic and political fields.

However, we cannot do this alone. By providing knowledge and offering co-operative assistance to our citizens, by carrying an *honest* message to them, and by urging them to voice their opinions actively, all of us together can hold fast to our American way of life and make it grow to meet the needs that constantly arise. Only in this way can we preserve for each American individual the right to private initiative, private enterprise, and personal planning for the future. We still can choose —if we *voice* our choice. Shall it be the welfare or the American state?

The Place of Psychiatry in Industry

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THE URGENT NEED for betterment of human relations in industry is widely recognized, but the extent to which psychiatric knowledge and methods could be constructively used is only beginning to be realized and accepted. During World War II, both psychologists and psychiatrists were called upon to assist in carrying out plans for the improvement of selection procedures, in developing supervisory training programs, and in furthering various activities which were aimed at maintaining employe morale at a high level. The draft examinations aroused concern among industrialists as among the public over the great incidence of neuropsychiatric disabilities among men of military age. Subsequent discussion of anticipated problems in connection with the re-employment of neuropsychiatric dischargees and casualties likewise created apprehension, but the true relationship of this situation to industry was neither understood nor adequately investigated, and the ill-advised publicity with which it was attended did more in the end to discredit than to encourage the assimilation of a sound psychiatric approach.

But the problem of handling psychiatrically handicapped workers is not a new one; it was not created, nor was it materially increased, by the war. It has always existed, and industry has always had to deal with it in some way, although never entirely satisfactorily or adequately from the standpoint of all concerned: management, labor, the individual, and the community. In industry as in most communities, standards for services provided for mental and emotional health fall far below those maintained with respect to physical health. Yet today there are no problems in industry more urgent than those directly and indirectly related to individual and group mental health, whether considered from the standpoint of the immediate incidence of adjustment difficulties which individuals manifest on the job, or that of the long-range relationships existing among working teams and between their leaders on the sides of management and labor.

The end of the war brought a rather sudden close to many of the promising undertakings in the field of industrial mental health on the part of psychologists and psychiatrists. It is a commentary on the type of expediency for which modern industry is sometimes noted, that when the cost-plus basis of operations was terminated, these activities fell into the so-called "frill" class, and on the basis of what is considered to be economy, were among the first to be either eliminated or drastically curtailed. Today there are scarcely more than a half-dozen psychiatrists employed by industry or labor on a full-time basis. A somewhat greater number of consultants are engaged on a part-time basis, but it is obvious that these supply only the barest fraction of the real needs. So far as available personnel with medical training is concerned, therefore, the brunt of the responsibility for handling psychiatric problems falls back on the industrial physicians and general practitioners who serve industry and labor. The competence of these men in this field varies through a wide range from those who have a limited, purely organic and "surgical" concept of the physician's function, with only a minimal interest in emotional factors, to those who have acquired a keen understanding of human nature and whose management of emotional problems and borderline psychiatric material equals if not surpasses that of some fully trained, qualified psychiatrists.

Before initiating or extending psychological or psychiatric programs for industry, it would be well to study the preparation, background, understanding, motives, and objectives of both the employer and the specialist who assumes responsibility for directing activities in the human relations field. As after the first world war, many self-styled experts and purveyors of pseudo-scientific devices are appearing on the scene. Business men who are eager to apply the newer techniques of the mental sciences to their particular employe and labor relations problems unfortunately have no satisfactory yardstick with which to measure the merit of the many attractively-packaged panaceas constantly being offered. Reputable psychologists, psychiatrists, and psychiatrically oriented industrial physicians do not promise cure-alls, but their clinical background gives them the soundest over-all equipment and experience for continuing needed studies to im-

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prove selection, placement, supervision and treatment of employes having some degree of mental or emotional handicap, and for teaching the techniques of better interpersonal relationships on all levels of industrial organization.

From the outset it should be clear that any plan for the extension and application of psychologic and psychiatric knowledge and methods cannot be ordered or superimposed by force or by directives from higher authority. The men who represent these disciplines must first win the support of key people in existing executive, personnel, medical, and labor relations departments who are already doing work in human relations. We cannot side-step the fact that there is still much groundwork to do in educating industrialists as to the unique value of our contribution, and in overcoming prejudices, blind-spots, and resistances. One of the most important tasks which industrial psychiatry still faces is that of explaining itself to those it can so effectively serve. Far too many industrialists still cling to the traditional belief that psychiatry benefits only the obviously mentally ill, and that it does relatively little to conserve the mental fitness of average normal individuals, much less actually to increase the productive capacity of people in working groups.

Fortunately most experienced physicians in industry are aware of the potential contributions which psychology and psychiatry can make, not only on the practical level of treating individuals in need of counseling, but on the preventive and policy-making levels as well. Specialists, working in collaboration with them, must teach and provide clinical training, both formally and by practical demonstration in specific instances, which will convincingly portray the value of a psychotherapeutic approach to industrial interpersonal relations. Painstaking efforts are required to overcome the resistance of certain men in top positions who are unaware that they create more problems than they solve by using coercive tactics which violate the principles of mental health. Some who have "come up the hard way" and whose training was exclusively in the fields of engineering, accounting, or law, are peculiarly impervious to a new, non-authoritarian approach to human relations.

It goes without saying that the medical department should be one of the major focal points within industry from which the spirit of constructive human relationships constantly radiates. Striking evidence of this need is given in Dr. William J. Fulton's article entitled, "Industrial Medical Potentials: A Time and Job Analysis of Medicine in Industry," which was published in the journal of *Industrial Medicine* for July, 1949. Fourteen years of experience and observation form the basis of Dr. Fulton's unqualified statement that "the human factor, not the health factor, is the underlying cause of most accidents, complaints, and personnel problems." True physical causes for complaints brought to the medical department were found in less than 50 per cent of the patients. Another significant finding is that 85 per cent of direct medical services are utilized consistently by only 30 per cent of the employes. This 30 per cent group includes the large majority of substandard workers with emotional, neurotic, psychosomatic, and psychiatric problems. Even though these individuals use up over twice as much time of physicians and nurses as average employes do, any curtailment of service to them would inevitably increase their already high rate of absences, minor accidents, dispensary visits, unsatisfactory personnel contacts, and incidence of grievances. Inadequate handling of the problems of this minority group would in the end still further reduce the medical care available to the other 70 per cent of industrial society.

But Dr. Fulton does not imply that the services of psychiatrists or psychologists as specialists are needed to care for the upwards of 60 per cent of employes whose complaints are based on a prominent "functional" (i.e., psychogenic) element. What is needed is indoctrination of more physicians, nurses, and employe counselors with the basic principles and techniques of psychotherapy to the extent that such measures are needed and are practical within the industrial framework. In a series of 100 employes referred to me during the war, I found that three-fourths of them could have been adequately cared for by a psychologist or counselor with the proper personality and training, and over 95 per cent would ordinarily be capably handled by the psychiatrically oriented industrial physician. Only 3 per cent were in need of advanced psychiatric assistance which fell outside the province of industry's responsibility, and which called for referral to a private psychiatrist. Thus even though the majority of employes coming to the medical department are psychologically rather than physically ill, the qualified physician and his properly trained aides

should be competent in caring for all but a small minority.

When viewed in the broadest possible perspective, the functions of mental health specialists in industry, whether psychiatrists, psychologists, or trained counselors working under their direction, include a constantly expanding range of both clinical and preventive activities. The clinical services to individual employes which have psychological and psychiatric implications can be listed as follows:

1. Appraisal of those factors in the individual's personality which bear directly on his fitness or unfitness for work. This constitutes a part of both the employment interviewer's and the physician's preplacement examination procedure.
2. Recognition of neuropsychiatric conditions in their earliest manifestations, not only in applicants for work, but also as these may make their appearance at any time after employment. Here are included psychoses, neuroses, neurosyphilis, alcoholism, epilepsy, and psychopathic personality.
3. Evaluation of neuropsychiatric factors in posttraumatic conditions covered by workmen's compensation laws.
4. Determination of the degree of employability or re-employability in postpsychotic states (e.g., recovery after manic-depressive episodes, involutional melancholia, and certain instances of dementia precox).
5. Consultation when and where required regarding the placement, transfer, promotion, or progress of individuals possessing valuable skill, but who exhibit potentially troublesome personality handicaps or deviations in their interpersonal relationships.
6. Assessment of emotional factors in accidents and absenteeism.
7. Application of direct psychotherapy in selected individual cases as may be practical within the limitations of the industrial setting.

It should be emphasized that the purpose behind steps leading to better recognition of neuropsychiatric disorders is not merely the elimination of all such persons as might be deemed to belong to the so-called misfit class. This is a misconception shared by many who associate the work of psychiatry with the exclusion of the mentally ill from society, and who think of industrial psychiatry as fulfilling a similar arbitrary function. Actually this is only a relatively small, negative aspect of selection which takes place in a more arbitrary, hit-and-miss fashion without psychiatric understanding than with it. The much more important positive task relates to the proper placement of individuals with some degree of emotional handicap who when properly placed and supervised can become as useful employes as those who are physically handicapped. Emotionally handicapped individuals have just as much right to work as the physically handicapped, and better understanding of their unique personality reactions should be the means of more effective occupational adjustment, not denial of the opportunity to work. Placement problems in these instances are usually more complex and delicate, since the human relations aspects rather than ability, skill, or type of work are of more determining importance in success or failure of employment. Here the selection process must extend to supervisors who have the requisite skills for handling such individuals, especially in the initial stages of their employment.

It has become increasingly clear that if psychiatry in industry is to fulfill a truly preventive function, it must extend its influence beyond the limited area of responsibility generally delegated to industrial medical departments. Years ago, Dr. V. V. Anderson, author of the first and still the only textbook devoted exclusively to this field, stated that the task of psychiatry in industry is much less that of providing clinical services for individual problem workers than it is to integrate its techniques with all personnel and supervisory procedures connected with the "employment case history" from inception through all stages to discharge or retirement. Perhaps the highest contribution which the psychiatrically oriented physician can make relates to both quantitative and qualitative aspects of all interviewing, testing, selecting key men for promotion, and counseling on all levels. The continuing education and training of executives, foremen, personnel administrators, and labor leaders, who are all in effect practitioners of human relations, involves no small measure of psychiatric indoctrination.

The approach to industrial human relations problems which the psychiatrist uses himself, and which he can to a considerable extent teach to others, can for practical purposes be considered as an adaptation of interviewing techniques. Interviews in the industrial setting tend to fall into three general classes: those which have to do with an exchange of factual information, those which involve training and education and hence require some application of the laws of learning, and those on the more complex therapeutic level which involve subjective emotional reactions rather than purely objective facts. Interviews regarding ef-

ficiency, attitudes, transfers, layoffs, promotion, rate of pay, or discipline may at any point require therapeutic skills for their effective solution. It is obvious that a higher type of counseling is required in the handling of problem employes, and individuals with complaints, dissatisfactions, grievances or repeated personality clashes. Grievances should be approached from the standpoint of both their manifest and their latent content; it is the latter which reveals the true motivation in individuals who are grievance-prone. Interviews whose central topic concerns symptoms of illness, even when this is apparently entirely physical, often require a similar inquiry into motivational factors. These of course fall more directly into the province of the physician and the trained technicians working with him. As has been mentioned, fully half or more of the interviews in the medical department involve the interplay of emotional forces and conflicts underlying the physical focus.

The time has come when psychiatrists, psychologists, and psychiatrically trained physicians can no longer remain aloof from social conflicts in the field of labor relations whose outcome depends to such an alarming degree on emotional rather than factual issues. Specialists in human relations must make available to industry their ability to analyze and alleviate the psychological factors which promote work stoppages and strikes. A strike represents a failure of solution of conflict, and has a status very much like the regressive symptoms which appear as a manifestation of a psychoneurotic reaction in an individual. The component forces leading to a strike are accentuated when they are overlooked, ignored, or mishandled after they break into the open. The proper approach is a preventive one which studies the emotional factors involved in individual and group reactions before they reach the stage of hostility and aggressive conflict.

Along with the clinical, advisory, and educational functions which have been mentioned, industrial psychiatry also has a research interest in the causes, types, setting, modifiability, and prevention of problems in industry involving personality and emotion. Much more study is needed of the factors underlying unreal beliefs, opinions, and attitudes which lead to destructive behavior and are consciously and unconsciously involved in the frequent distortion of communications in large organizations. Further analysis is needed of the feelings of insecurity, frustration, and disorientation which are incident to the introduction of new technologies. Studies must be made of the determinants underlying human motivation in relation to work, conflict, and co-operation, with a view to a better evaluation of the "rules of thumb" now used by various leaders in industry and labor organizations. The psychiatric case study method, applied to normal and successful employes, can aid in establishing a baseline and frame of reference for studying the poorly adjusted individuals. Such investigations will in turn point the way to a constantly wider application of the concepts of psychiatry in industrial human relations.

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EXPERIENCE WITH ROUTINE Rh TYPING IN OBSTETRICS

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Iatrogenicity in Medicine

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IATROGENIC ILLNESSES are those disorders unwittingly induced in the patient by the physician, based on the physician's examination, manner and discussion.[1] This paper will be limited to the iatrogenic role of emotion in disease.

Two thousand, five hundred years ago, Socrates chided the Athenian physicians for their organistic medical attitude and expressed his belief that the body could not be cured without treating the mind; that the cure of many diseases was unknown because physicians were ignorant of the whole. This rebuke is now accorded the stature of a truism. Medicine also further recognizes that a physician's unawareness or misunderstanding of the role emotion plays in disease may not only prevent cure but may precipitate and perpetuate illness.

Iatrogenicity usually results from: (1) failure to recognize the existence of emotional factors in illness, (2) inability to treat minor emotional disorders if recognized, (3) lack of awareness of the role which the physician's feelings, attitudes, and behavior play in the cause and cure of sickness.

Failure to Recognize Existence of Emotional Factors in Illness

The genesis of these three factors is largely rooted in the limitations imposed by the Virchovian concept that equated disease to cellular pathology. This structural orientation, utilizing anatomical and histological techniques, revealed the organic architecture of disease. The application of physics and chemistry clarified the functional interrelationships of the body parts. This structural approach led to the concept of the human organism as a machine in which all disorders could be explained either as a nutritive defect or a fault in one or more of the component parts, organ, tissue or cell. Diagnosis became synonymous with identification of the deficiency or faulty part. Therapy based on these premises became more or less rigid, static and mechanical, and it was assumed that correction of the deficiency in body needs, repair or elimination of the faulty part would result in a cure.

The fallacy of this approach to the cause and cure of disease lay not within the structure of this concept, but without; i.e., this mechanical approach did not take into consideration such important factors as: (1) the psychological aspect of the individual and the inseparable relationship between psyche and soma, (2) individuality *per se,* (3) environment. This restrictive, organistic concept of illness necessarily failed to answer such vital questions as: (1) How can the illness be prevented? (2) Why did the patient become ill at this time? (3) Why is the patient reacting in this particular manner to his illness?

From time immemorial, environment has been credited with causing the ills of man, but these observations were distorted and hopelessly intermingled with religion, superstition and magic. In discarding these animistic and metaphysical philosophies as being nonscientific, the importance of man's surroundings as a factor in disease was correspondingly shunned and neglected. Pasteur's discoveries reawakened an awareness of the importance of environment in the cause and cure of disease and indicated the scientific validity of such observations. However, translation of these implications to admission that psychological factors in the environment could also produce disturbances in the human organism was not immediate.

Resistance to such a concept was based on the criticism that phenomena which could not be measured or reproduced according to rather rigid criteria could not be accepted as being scientific. The past observations of emotion had always been so closely allied with the occult and esoteric that the status of psychiatry as a science was long delayed. These two factors long denied psychiatry a legitimate place in the circle of science. Final admission of the scientific validity that psychological factors could produce disturbance in the organism, plus the observation that there were individual variations in reaction and behavior in an identical environment, led to the ultimate concept that in illness, the "cause is twofold and lies both in the nature of the individual and in the nature of his environment at a particular point in time."[2]

The most appropriate medical action, therefore, is not limited to concern with a "faulty part" of the body, but is "concerned primarily with the measures designed to: (a) alter or prevent char-

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acteristics of the person known to be causal, and (b) alleviate or remove factors of the environment known to be causal."[2]

I have prefaced my discussion with this historical genetic preamble on the cause and cure of disease because therein lies many an iatrogenic root. This narrowed focus of attention tends to preclude an awareness of the individual as such, and his inter-environmental relationships. Such a preclusion eliminates awareness and understanding of the existence of emotional factors in illnesses.

Let us restate the fact that the most common cause for medically induced illness is failure to recognize the existence of emotional factors involved. Years of pregraduate and postgraduate teaching have convinced me that this failure reflects a major defect in basic medical education. Even now, our medical orientation is largely limited to the mechanistic viewpoint to which I have just referred. To repeat, this narrowed focus of attention tends to preclude the doctor's awareness of the individual's environmental relationships. Without this awareness, the existence of emotional factors goes unperceived, and their relationship to sickness unnoticed and not understood.

The traditional form employed in taking a medical history clearly reflects this mechanistic philosophy. It gives you an excellent concept of the status of the body parts, some idea of function, usually limited to a system concept, but tells you nothing about the individual *per se,* his environmental relationships, or his feelings. For example, a history of intestinal dysfunction alone does not suggest hostility, and it certainly does not tell you that the intestinal complaints may be a functional reflection of acute marital discord.

Not infrequently, on being called into consultation, I find a patient who literally is eager to relate the distress of an unrequited love, anger over an allegedly philandering husband, or fear of carcinoma. My colleagues, upon being advised of the rather obvious immediate cause for the patient's anxiety, are given to asking, "How did you find that out?" strongly implying what magic or what sorcerer's brew had I used.

The formula is: *I listen to the patient.* It is important to listen carefully to the heart. It is equally important to listen to the patient. It is important in doing a complete examination to palpate the abdomen. It is also important to feel what the patient is feeling. I do not mean that in all cases the patient will immediately reveal the area of his conflict through the simple expedient of listening. Not infrequently, however, he can, and will, if but given the opportunity.

If the pursuit of pathology is exclusively oriented toward the discovery of the culprit organ or tissue, the patient, in deference to your professional rank, forsakes his amateur opinions and joins you in the pursuit of the organic will-o'-the-wisp, through the laboratory, into the roentgen room, as a bewildered partner in a tag dance with multiple specialty consultants. Then midnight, and alas, the organic glass slipper does not fit. The patient is discharged wearing sackcloth and ashes variously labelled: "Medical examination, no pathology found. Ill defined condition, no cause determined." Not infrequently some innocent anomaly or non-causal pathology uncovered in the organic witch hunt is falsely honored and burned at the diagnostic stake. Lo, the tipped uterus, the flat foot, the infected tooth, the evil adhesion! Repartee at times becomes difficult when the pathologist comments on that chronic appendix, "Another interesting specimen, normal you know." Before crossing the diagnostic "track," listen to—as well as look at—the patient.

Other issues must be considered if the failure to recognize the existence of emotional factors in disease is to be fully understood. Although the nonscientific shadows from which the science of the psyche arose now belong to the historical past, the stigmata of being nonscientific still becloud professional as well as lay feelings. Physicians tend to avoid materia psychologica for fear of being compromised in the eyes of their confreres. As a reflection of these feelings, I have often noted the nonchalant ease with which the mistake of misidentifying and mistreating an emotional disturbance as an organic disorder is accepted, in contrast to the derision and opprobrium which greet the erroneous diagnosis of tissue pathology as a psychological disorder.

The failure to accept psychiatry and the allied sciences, the feeling that psychiatry constitutes a somewhat difficult, rather esoteric, and even peculiar sister specialty, is also due in part to certain growth characteristics, even defects, within the specialty itself. Psychiatric terminology has produced a barrier that makes the transfer of ideas difficult to the uninitiated, often obscuring the otherwise simple and obvious. This tendency to speak a "foreign tongue" is not conducive to understanding. Partly because of the tremendous

need, and in part due to the adolescent boasting of a young specialty proclaiming its place in the circle of science, it has been called upon to fulfill, or has made, claims that it cannot yet meet. Failure to meet all expectations has resulted not infrequently in a complete denial of the very real contributions it has to make and irrational rejection of the importance of emotional phenomena in disease. Any science in its infancy somehow tends to attract individuals whose personality problems in themselves may be the motivation for this interest in the different and the strange. The very nature of psychiatry creates a moth-like attraction for those who come consciously to cure, but unconsciously to be cured. As the questionable appeal of the mysterious has dropped away and with awareness of these factors in selection of candidates for training in the specialty, this situation is disappearing. However, I should like to comment that irrespective of these personality traits, many such men have made major contributions in the field, but public relations were neither fostered nor the science accepted the more kindly because of their own peculiarities and eccentricities.

Because of the tendency to see only that which is acceptable, these common scotomata reduce the professional field of vision for emotional factors. I would not belabor the importance of these blind spots if it were not for the fact that they obscure such a tremendous area of clinical importance. Since every third patient who comes into your office will be suffering primarily from an emotional disorder, and in the next patient whom you attend these factors will be of equal importance to existent organ pathology, correction of faulty vision in this area is not then to concern ourselves with minutiae or the trivial.

How does failure to recognize the existence of psychological issues in an illness cause or promulgate illness? This question can be more accurately phrased, "How can misdiagnosis cause sickness?" Persistent professional preoccupation with and the pursuit of the "faulty part" imply clearly to the patient that in view of his complaints you feel he must be host to such a defect. Now, in addition to whatever concern was present before, you have created another source of anxiety *de novo,* a threat to his body integrity. The patient is now enjoying the dubious pleasure of iatrogenic anxiety, which under your guidance before long will become affixed to the organic "red herring" for which you have been searching. Typical "red herrings" are functional physiological disturbances, secondary to the anxiety so created, or some innocent anomaly or non-causal pathology dragged up from the depths by the diagnostic dragnet. Now original anxiety, plus that professionally induced, typically become affixed to whatever system has been circumstantially incriminated by a focus limited to organ evaluation. Spontaneous or situational resolution of the original stress responsible for the patient's initial complaints does not result in a cure, for now the patient is preoccupied with whatever organic scapegoat was constructed by the physician's exclusive attention to physiological phenomena. In emotional disorders misidentified and mistreated as organic diseases, the tendency is not toward recovery but toward chronicity.

Misdiagnosis and mistreatment are common causes of iatrogenic illness when the unidentified and untreated etiology is psychological in nature. It is not necessary to give a stated misdiagnosis to constitute an actual misdiagnosis. Following a detailed and meticulous inspection of all organic crannies, you may advise the patient of your negative findings—but too late. Your scientific curiosity now may have been satiated, but the patient's anxiety remains. He will follow the implied organic die that has been cast from office to office, literally looking for something that cannot be found. At this point it becomes increasingly difficult to reverse these trends. The physician has supplied the patient with a certified rationalization for his anxiety which tends to reduce conscious recognition of it and further supplies a socially acceptable reason for whatever limitations the illness may impose upon him. I mention this because not only is there a feeling among the laity that emotional disorders are evidence of character weakness, a social disgrace, cause for shame and criticism, but you may have implied similar feelings by so assiduously avoiding the emotional sphere. Furthermore, the doctor may actually feel this way about disorders due to emotional disturbances. These feelings and behavior on his part are powerful fixing agents in iatrogenic illness.

Let us return to the assumption that you find no pathology explanatory for the complaint state and so advise the patient. What do you tell the patient? "There is nothing wrong with you," with the addenda, "It's your imagination," or to defend your prestige from the possibility that "something" will be uncovered by another colleague, "That

heart murmur—not important, probably will never bother you." "I don't find your condition really serious. I'm sure everything will work out all right (you hope)." Because of the trend engendered by your repeated negative examinations and your attitude, the patient frequently interprets this as, "He didn't find anything, but there must be something wrong (organically). Because he didn't tell me what it was, there must be something very seriously wrong." This mug-wumping technique of trying to be right in any event dismisses your patient with no other alternative than to continue further the distressing pursuit of organ pathology. Now the patient is typically off on an endless tour of iatrogenic medical shopping. Prejudiced by professional orientation to which I have just referred, the patient shops hopefully in the "organ department" but obviously never can find quite the right article. Many purchases are made but always with the inevitable discovery that the purchase is somehow never a satisfactory fit.

To reiterate, this endless quest is instituted by the doctor's original failure to note the emotional etiology for the patient's complaints and is misdirected by the total examination technique being exclusively oriented around the concept that all pathology must be equated to tissue pathology. It is apparent that the final pronouncement of "no pathology found" is not only untrue in the broader sense but in no way supplies an answer to the patient's need for assistance. Indeed, frequently, to the original need for seeking medical assistance is added the necessity of disproving his interpretation of such a pronouncement, i.e., "It is not my imagination," "I am not malingering."

It is apparent that hostility toward the doctor in particular, and medicine in general, results from such a situation. Financial depletion, enforced devotion to quackery, disillusionment and enmity toward legitimate medicine are often inevitable end results of this process.

Inability to Treat Minor Emotional Disorders If Recognized

Recognition of the presence of emotional factors in illness alone is not an answer to the patient's needs. What is or is not done after establishing a diagnosis is obviously of the greatest significance. Realistically, there is little difference between faulty and correct diagnosis if subsequently no treatment or inappropriate therapy is instituted. The previously mentioned factors responsible for the physician's failure to recognize the importance of emotion in disease also explain failure to treat or the inadequate treatment of the affective components of disease. This breach in the physician's therapeutic armamentarium not only fails to promote recovery but may prolong or incite illness.

The physician who feels lost when faced with a psychological disturbance frequently terminates his responsibility to the patient with the diagnostic pronouncement, "It's your nerves . . . You are neurotic . . . et cetera," without further definition of the patient's emotional disorder in common-sense terms which he can understand and accept. I do not mean to imply that you should avoid the use of appropriate and accurate technical terminology because of the false odiousness which has become attached to such terms as psychoneurosis, psychopathic personality, hysteria, et cetera, due to widespread misuse and misunderstanding. Indeed, it is a professional responsibility to eradicate these erroneous concepts not by avoidance but by appropriate interpretation of these diagnostic labels in terms of the individual patient's life experiences, so it will aid in the patient's understanding and acceptance rather than generate anxiety and apprehension. This applies not to psychiatric terminology alone but to the use of technical lingo in general.

Fear and anxiety are the bastard offspring of the unknown. Blessing a patient with a diagnostic label without an interpretation that is understandable to him may be a crippling phenomenon itself. Hiding your own ignorance behind the mask of scientific verbiage is more frequently depressive rather than impressive to the patient. A recent survey of the laity revealed that their most common criticism of the medical profession was that physicians did not explain their illnesses to them. This criticism clearly reveals the anxiety and resulting hostility provoked by the unknown, that is, leaving the patient "in the dark." If you underestimate your patient's capacity to understand, be assured that he will return the compliment.

The anxiety created by diagnostic labelling without explanation is frequently interpreted by the patient as libelling, and forces him to defensively deny the validity of the physician's diagnosis, particularly if the physician indicates that such a diagnosis precludes further treatment. This reaction is often further abetted by the doctor's

basic feeling that emotional disorders are the lot of the weak and depraved. The patient now seeks help elsewhere, but having learned that assistance is not forthcoming if emotional disturbance is revealed, he now confuses subsequent physicians with a distorting organic smoke screen. If the disorder requires specialty care, the manner of referral is important. Much in the same way that the manner of presenting a diagnosis of emotional disturbance may be helpful or harmful to the patient, so is the technique of referral implicit with the same potentials. If the referral is essentially a rejection of the patient with the inference, "I can't bother with you. You're crazy. Go see a psychiatrist," the patient may not be able to subsequently seek appropriate help because of the anxiety, resistance, resentment, and need to deny engendered by such an approach. These feelings may be so strong that the psychiatrist is contacted only for the purpose of disproving and denial. Needless to say, the physician who dupes the patient by not advising that he is being referred to a psychiatrist frequently constructs an impossible barrier to therapy. The other extreme in iatrogenic referral method, the pollyanna approach, that implies to the patient that a visit to the magician, a chant, a touch of voodoo and all will be well, predicates treatment with an illusion that often precludes actually helping the patient. It is obvious that medical schools should prepare all physicians to treat minor emotional disorders. It is fortunate that at the present time most schools are modifying their curricula in this direction.

Lack of Awareness of Role which Physician's Feelings, Attitudes, and Behavior play in Cause and Cure of Sickness

Recognition of the important role which the doctor's feelings, attitudes and behavior play in the cause and cure of illness is dependent upon acceptance and understanding of the role that emotion plays in the cause and cure of disease. In spite of this understanding, the doctor frequently neglects to evaluate, indeed is unaware of the effect which he, himself, has upon the patient. Time prevents even a cursory examination of the significance of the physician-patient relationship. In a broad sense I touched upon some of the factors in the preceding discussion.

Illness in general is a threat to the patient, increasing his dependency, i.e., the need and wish to be cared for. In general this feeling is present to a greater or less degree in all patients who come to a physician. Implicit in the doctor-patient relationship are the same constructs and feelings that exist between a child and parent. It is obvious to you that the parent's attitudes, feelings, and behavior are reflected in and have a great influence upon the child. Dependent upon the severity of the illness, the degree of helplessness enforced or provoked by the illlness, the duration and intensity of the doctor-patient relationship and the patient's previous experience with parental and authority figures, so will the doctor's personality play a role of varying importance in the course of the patient's reaction to his illness. Because of the infantile character of these phenomena, you are invested somewhat automatically by the patient with feelings rooted in earlier relationships with parents or other dominant figures. The wife's comment that her husband acts like a small boy when sick, the doctor's remark that the patient in Room No. 24 is behaving like a baby, the nurse's statement that the patient wants to be mothered, and the patient in extremus calling for his mother are everyday examples of this mechanism. It is therefore obvious that the doctor's own feelings, attitudes and behavior not only are powerful factors in curing but correspondingly may provoke or perpetuate sickness.

Let us inspect some of the more common feelings of the physician and note how the resulting attitudes and behavior may promote sickness rather than well-being in the patient.

Anxiety in the physician is transferred almost immediately to the patient and is usually increased markedly in the process. This transfer is dependent not only upon what is said, but frequently upon what is not said, the character of the voice, gestures, et cetera, i.e., the entire repertoire of expression by pantomine that frequently speaks louder and more convincingly than words. The patient accurately perceives your attitudes and actions, but inaccurately interprets them according to his own needs and feelings. You may be reacting to a preceding patient, but the next patient will probably interpret it as applying to himself. If you are anxiously beating out an "S.O.S." with your fingers on the desk or doodling with agitation while verbally reassuring a hypertensive patient that his blood pressure is satisfactory, to relax and stop worrying, I can assure you that the

patient will understand what you are doing and reject what you are saying.

Anxiety typically provokes two basic types of reaction, flight or attack. The tendency to flee is occasionally manifested literally by abandonment of the patient, but more typically by denying the existence of the patient's problem. Not infrequently this is the actual explanation behind the diagnosis, "No pathology found." Because of the anxiety provoked by the physician's sensing the presence of the patient's emotional disturbance, but because he feels unable to master the presenting problem, this awareness is pushed back into those recesses of unawareness referred to as the unconscious. To an extent, we see, hear, and feel only what we wish to perceive.

The expression of anxiety through attack is most commonly manifested by hostility toward the patient. Hostility itself in many guises. The attending physician's remark, "That patient, a damn neurotic, nothing wrong with him," patently reveals the anxiety behind this hostile attack. Such a comment is easily interpreted as, "This patient is emotionally disturbed. I feel I can do nothing about it. I am doubtful of my own capabilities. By denying that the patient is sick and depreciating him as being not worthwhile, I feel less threatened." The bombast of the visiting staff, the terrorizer of nurses, and the bane of the resident's life is frequently an anxious individual fearful of his own inadequacies. The patient may be attacked more subtly, more disastrously. Anxiety and hostility in the physician can be most potent iatrogenic agents.

Another common feeling within the physician that is fraught with iatrogenic potentials stems from the doctor's need to receive undue gratification from the patient. The ways in which this need may present itself in the physician-patient relationship are multiple and diverse. Inspection of the physician's careful attention to his patients may reveal that this seeming altruistic attitude is not an expression of his capacity to give but rather of his desire to receive. The unhealthy implications of such an infantile attitude are apparent. Sickness becomes the medium of gratification for the physician. Often where you find an Elizabeth Barrett as a patient you will find a Mr. Barrett as physician. A more common and perhaps less malignant manifestation of the same phenomenon is seen in the physician who cannot accept the least hostility from the patient, for this so threatens his need for love that the protest of rage and indignation thereby provoked clearly resembles the reaction of a child whose immediate desire for gratification is being obstructed, in truth, a temper tantrum. Interestingly, these same dependency strivings may present themselves in quite a different fashion. To defend himself against these urges, the physician reacts in quite the opposite manner. By denying his own needs he also fails to recognize the patient's normal need for dependency support in sickness. This defensive character trait results in some physicians being distant, dispassionate, aloof—the "cold" scientist. Or the patient's dependency may so distressingly activate his own wishes that in denying them he angrily berates the patient with, "a damn baby, acting like a child, et cetera." Then there is the physician whose narcissistic needs dictate that he must preserve the illusion of omnipotence. This is the doctor who plays God and enforces his patients into a status of complete dependency. These are the poor patients who, should they fail to improve, or indeed do not do exactly what the physician says, must bear the brunt of a revengeful Jehovah and assume full guilt for their failure to recover.

In attempting to present a topic of such latitude as the iatrogenic importance of the physician's feelings, attitudes, and behavior in the brief time allotted, I have taken the license of generalization and use of the extreme for illustration, but I have tried to avoid confusing reality with exaggeration. The role of the physician's personality in treatment, like a sword with two edges, may cause as well as cure disease.

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MSMS

UNIFICATION OF HOSPITALS

. . . We propose a unification of the Government hospitals, health service, medical research and guidance to Governmental grants-in-aid to civilian hospitals.

As an indication of waste, there already existed in Federal hospitals, at the time of our investigation, beds for 225,000 patients and only 155,000 were occupied.

Yet Congress had made appropriations for, or authorized, hospitals with 50,000 additional beds despite the fact that 70,000 are empty—at a cost of $1,300,000,000. President Truman canceled out $300,000,000 of this program, and Congress restored the authority.—*Hoover Commission Report.*

Observations on a Recent Journey in Sweden

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AMERICAN and other visitors to Sweden cannot fail to be impressed by the quality of its medical services in general and its new hospitals in particular. In Stockholm, the capital of the country, with a population of slightly less than 700,000, two new hospitals have been opened to the public during the past decade. They are Karolinska Sjukhuset (the Karoline Hospital), and Sodersjukhuset (the Southern Hospital). Each has a capacity of about 1,200 bed patients.

The Karoline Hospital has attached to it the new buildings of the Radiumhemmet, probably a model to the entire world for the study and treatment of malignant diseases. This department is under the able direction of Professor Elis Bervin, a world-renowned authority on malignancy.

The Karoline Hospital is located in the northern outskirts of Stockholm on a solid rock foundation (granite) and in the center of a wooded plateau comprising an area of about 559,000 square meters (115 acres). There is a special building for medical research, a memorial to King Gustaf V, which has exceptional facilities for such work. It is under direction of the highly qualified internist, Professor Nanna Svartz.

The Karoline Hospital represents the culmination of a lifetime of planning and co-operation between physicians, surgeons, and architects.

To this observer, at least, it would be difficult to find any shortcomings in planning for either efficiency and beauty or economy. The names of Professor Einar Key, surgeon, Professor Gosta Forsell, roentgenologist, Professor Nanna Svartz, internist, and Professor Carl Westman, architect, are probably the most honored in connection with the building of this great institution. I am particularly indebted to Professor Key for a personally conducted tour of the most important buildings. The heads of the departments took great pride in showing their respective domains, and their courtesies were unlimited.

The cost of construction amounts to about 29,000,000 kronor (almost 8,000,000 dollars); the equipment cost was 6,500,000 kronor (about 1,800,000 dollars).

Since the Karoline Hospital receives patients from all of Sweden, including Stockholm, and is entirely a teaching hospital, the cost of construction was borne by the country as a whole, and the city of Stockholm plus such funds as the King Gustaf V Jubilee Fund for medical and cancer research.

The Swedish Parliament has recently granted funds for the construction of a special pavilion for thoracic surgery. The initiative for this construction probably comes from the pioneering work and sensational successes of a brilliant young surgeon, Dr. Clarence Crafoord. His work on malformations of the aorta and larger intrathoracic blood vessels have received universal recognition. Dr. Crafoord has carried on his pioneer work at the old Sabbatsberg Hospital in co-operation with the cardiologist, Professor Nylin. The new pavilion will be part of the Karoline Hospital and will help to centralize the teaching facilities of this institution.

A prominent feature of this hospital is the mortuary with eight small chapels, where dignity prevails and the bereaved families are permitted to view the bodies of the deceased. A larger chapel with an organ may be used for religious services and burials. There are also facilities for baptism of the newborn if the parents so desire. These departments are located in the basement of the main building and are completely isolated from the view and the activities of the clinics and care of the patients. Professor Key took great pride in this detail of a large, modern hospital and the satisfaction it gives to the public in times of human tragedies.

Preparedness for a possible eventuality of air raids or other war activities has been made. Deep subterranean tunnels have been blasted out of the rocky ground, with shelter for personnel and emergency operating rooms. These are not open to visitors.

There are beautiful parks with paths, water pools, and pine trees, making an ideal surrounding for convalescing patients.

On Saturday mornings, promptly at 8:30, the entire staff meets in the Roentgen Department. In the long rows of shadow boxes, films are demonstrated by the roentgenologists to those interested, and are discussed by members of the staff. At 9:00 a surgical conference is held in the large

Dr. Larsson's journey to Sweden was made in September and October, 1948.

amphitheatre. Four fifteen-minute papers, with demonstration of cases, are presented under the direction of the surgeon-in-chief, Professor John Hellstrom.

The amphitheatre seats 200 people. It is very modern in construction, with indirect artificial daylight coming from a large ceiling-cupola. The light is controlled by the speaker who lowers or raises its intensity to suit the occasion. An ingenious device permits the speaker to draw or sketch on paper and to project this on the screen while facing the audience. The paper can be moved back and forth while the speaker makes his points and demonstrations on the large screen. There are no outside windows to confuse the lighting effects.

The largest wards have six beds, three on each side of the room. There are four-bed and two-bed rooms as well and a limited number of private rooms. All beds are provided with an overhead projecting arm with a sling to assist the patient in moving himself in bed. By each bed stands a combination cabinet with feeding table, a reading stand for books or papers, and space for the toilet equipment for the patient. The beds are of special design and mounted on four fair-sized wheels situated near the midsection of the frame. This facilitates moving of the patient to any place in the hospital without the use of stretchers. Each door has an ingenious handle, large and curved upward so that it can be opened by a nurse carrying a tray or instruments by a pressure with the elbow.

Equipment for physiotherapy is abundant, as well as open and closed sunporches.

Well-equipped apartments for nurses or interns are scattered about the grounds. A certain limited number of homes for married house staff is available. Many of the hospital personnel who have special responsibilities live in homes within the hospital grounds.

A silent system of light signals has been installed for intercommunication, with assistance of the Stockholm Fire Department. There are no loud speakers.

Waiting-rooms for the public, snack bars, and other conveniences are very pleasant, and an effort has been made to obliterate any hospital atmosphere.

The staff dining-rooms are pleasant and meals are served smorgasbord style. One buys a metal coupon which entitles the visitor to the meal, with plenty to choose from.

The Karoline Hospital can be reached by bus from the center of the city in ten to fifteen minutes.

On the south mainland of Stockholm, occupying a dominating height of granite rock, lies the new Southern Hospital, which was opened to the public in 1943. The building is practically one large complex under one roof, its building material being yellowish sandstone and brick of the same color. The hospital overlooks the city and can be seen from a great distance. The Southern Hospital, which is a Stockholm City Hospital, has 1,200 beds intended for the treatment of acute conditions or for complicated examinations. From the very beginning, this hospital was conceived as a complete "health welfare centre" and is linked with other medical institutions and those dealing with social welfare. It is not so much intended for teaching purposes as for care of the poor, for accident cases and for traumatic surgery. Practically all medical specialties are represented in care of the sick and in such proportions as has been determined by careful statistical studies.

The construction and equipment of this hospital represents the last word in such efforts. Long and careful studies by architects, medical men, hospital economists, and others culminated in the building of a truly monumental institution.

There are private, semiprivate rooms, and three- and four-bed wards. The chief surgeon, Dr. Palmer, who kindly showed me around, stated that the four-bed rooms were less economical than the six-bed ward in the Karoline Hospital.

Beneath the main building is a complete underground central infirmary blasted in the cliff, with seven to eight meters of prime Swedish granite as roof. Here have been installed wards for about 700 bed patients and further wards and space for walking patients and visitors. There are two complete operating departments with two operating tables in each and space for sterilization, x-ray department, et cetera. The shelter has its own Diesel-engine driven power station and its own water supply from a special well sunk in the rock.

A railway tunnel runs through the cliff, with good emergency facilities in the event that all ordinary entrances are blocked by bombing. The air-raid shelter can accommodate over 2,000 persons.

The highest effectiveness in the care of the

sick has been the guiding principle in the work of designing this hospital.

Close to the hospital, blocks of flats have been erected where the staff of the hospital can rent apartments on favorable terms.

In order to avoid mixing of patients and visitors, there are two separate entrances. Patients are admitted on the ground floor, visitors and staff in the basement. Cloakrooms are located on both sides of the big visitors hall which is estimated to hold about 2,500 persons. Visitors leave their outer garments in the cloakrooms in order not to carry damp garments and the like into the hospital proper. Information service and exhibits concerning social work and other institutions may later be installed in this large hall. There is a special entrance for ambulance patients to avoid mixing of visitors and the sick and the injured.

The maternity department, so susceptible to infection, has been given separate entrance and exit.

The main building has a volume of 450,000 cubic meters, making it the largest building erected in the northern countries. It has nine stories above and three below the ground. Its height above the ground is 35 meters. Altogether, the building contains 5,400 rooms, including cloakrooms, lavatories, et cetera.

For vertical transportation, there are twenty large elevators for the transport of beds. Each can accommodate twenty ambulatory patients as passengers. The total number of elevators amounts to fifty. Chutes care for rubbish, garbage, and soiled linen. The design also includes pneumatic tubes, though these were not installed at the time of my visit.

The professional work performed at these two hospitals is on a very high standard. The leading men have visited the United States and other countries, are leaders in the profession in their respective specialties, and compare well with the world's best. The quantity and quality of reprints of published contributions, which I have received, bear witness to this fact.

There are many old hospitals and clinics scattered about Stockholm where good work is being done, though in less favorable surroundings. The oldest is the Serafimer Hospital, built in 1752 and still very active. Many famous men in our profession have done their work there, for instance, Olof Acrell, Linneus, Key (father and son), Forssell, Johan Berg and Berzelius, to mention a few.

In the city of Gothenburg, the largest port city on the west coast of Sweden, there are several first-class hospitals. In spite of old-fashioned buildings, excellent work is being done here. I should like to mention the work of Sven Johansson in bone surgery and Dr. Einar Ljunggren in urology.

Dr. Johansson was one of the pioneers in using the special nails in fractures of the neck of the femur. His successor is Dr. Gunnar Lauritzen who has been interested in using the marrow nail in the treatment of fractures of the long bones. He recited the story of this new treatment in about 200 cases since 1942. (The treatment originated in Kiel, Germany, in 1941.) He found it especially useful in transverse fractures of the femur, tibia, and humerus, but has also used it in oblique fractures with equally good results, whether compound or simple. He emphasized that this method should be used only in large hospitals with experienced personnel. The results have been good in 80 to 90 per cent of cases, and the great advantage is the considerable shortening of the period of invalidism. Fat embolism has occurred as a complication, but rarely; other difficulties occasionally occur.

Dr. Einar Ljunggren's great contribution is in the treatment of genito-urinary tuberculosis. He combines surgery with a new chemotherapeutic agent known as PAS, or para-amino-salicylic acid. This chemical was developed by Professor Lehman.

The medical treatment is carried on at a sanatorium located in a high wooded area approximately 40 kilometers north of Gothenburg. This sanatorium has about fifty beds and is reserved strictly for genito-urinary tuberculosis cases. It is part of the large Sahlgrenska Hospital in Gothenburg, where all cystoscopic and surgical procedures are carried on. The medical regime is under the direction of a resident physician who combines treatment of the universally accepted type with PAS. Dr. Ljunggren visits once weekly as surgical consultant. He is rather conservative regarding surgical intervention, nephrectomy, and other urological procedures. His results in ulcerative cystitis with bilateral renal tuberculosis are remarkable. He believes that it is of great importance first to try to diminish dissemination of tuberculous infection; second, to attain a better result in urogenital tuberculosis as well as in all other forms of the disease. These patients should not be operated on until a phase of less activity has been

reached, or the disease has become stabilized. The sanatorium treatment is carried out most thoroughly before as well as after surgical interventions. Besides the usual laboratory tests, a new aid has come from France, the Barge-Bourgain reaction. Whenever this reaction is positive, surgery is not undertaken. Dr. Ljunggren concludes by saying that a combination of sanatorium treatment and chemotherapy as well as careful watching of patients with urogenital tuberculosis will facilitate recovery to a very high degree. This applies particularly to the early cases of renal tuberculosis where a mutilating nephrectomy often can be avoided.

Para-amino-salicylic acid (PAS) is administrated in tablet form with or after meals or with a glass of milk. It is not to be chewed, since it is acid and may cause gastric irritation, but is intended to be broken up and absorbed in the duodenum. The PAS treatment should be carried out without interruption for several months. Smaller doses are used in renal than in pulmonary tuberculosis to prevent injury to the kidneys. The sodium salt of PAS is preferable, though it is more difficult to obtain at present and more expensive. The dosage is 8 to 12 gm. per twenty-four hours in four to six divided doses. Routinely 10 gm. are given in six divided doses. However, this is varied according to tolerance. The effect of the drug is noticed in less troublesome cystitis, increase in bladder capacity, and disappearance of tubercle bacilli from the urine. The usual tests, including guinea pig inoculation, et cetera, are the standard for control of the patient's progress during this special treatment.

These observations would not be complete without recording a regular meeting of the Gothenburg's medical society. This was held at a small, private hospital, the Karlanderska Sjukhuset. The assembly hall of this hospital resembles a chapel of pure Gothic architecture. Of the 300 members of the local society, about 100 were present. The scientific program of the evening dealt with alcoholism in Sweden, evidently a rather acute problem. The speakers were both laymen and physicians, including judges and the chief of police. Dr. H. Forssman read a paper on the use of a new Danish preparation, Antabus, against alcoholism. This new drug is administered in pill form in definite doses, the pharmacologic effect of which lasts five days. It is harmless and is eliminated by the bowel. It has been used ten months without harmful effects. In 70 to 80 per cent good results have been reported from Denmark. The case of a young man, an alcoholic, was demonstrated. He had previously received the drug. The speaker treated him to 15 cubic centimeters of cognac from a test tube. In fifteen minutes he returned, feeling nauseated, face red and hot, apparently very ill at ease. A lively discussion followed the different presentations.

Following the meeting, a fine banquet was held at the Palace Hotel, with continuation of the discussion on alcoholism but without any drastic measures taken to prevent it, during that evening, at any rate.

I noticed a great interest and appreciation of American medicine, and had the opportunity to express my gratitude to my Swedish colleagues for their cordial hospitality and generous sharing of experiences.

The Swedish physician is alert, usually speaks good English, and is always proud to show foreign confreres what is being done and to exchange ideas. There are many opportunities for special studies as well as general observation in the management of the sick and needy. The observations recorded here are of necessity brief and general but may be of interest to reveal how a small country of homogeneous population and limited resources, but with very high living standards, is able to provide this most vital service to its people.

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TWO MEALS A DAY

When Mary Garden, the famous opera singer of bygone days, stepped off a steamer from Britain recently, her slim, girl-like figure attracted immediate attention. She is seventy-two and weighs only one hundred and twelve pounds. When asked how she kept her weight down, she replied that for thirty years she has eaten no evening meal. Her home is now in Scotland. She came to this country for a lecture tour.

It would be idle to advise all who wish to avoid overweight to follow her example. Very few persons would adhere to her regimen. It is not necessary to eat only two meals daily to keep one's weight down. It is a matter of total daily caloric intake. It is only necessary to reduce the amount of food consumed the first two meals, thus leaving something for the third meal of the day.—*Good Health,* December, 1949.

Rehabilitation of the Hard-of-Hearing School Child

Detroit's Plan

By L. Galdonyi, M.D.
Detroit, Michigan

ACCORDING to reliable estimates, there are about ten million hard-of-hearing adults in the United States. A large percentage of these can trace back the beginning of their hearing loss to childhood. Repeated surveys, conducted in various parts of the country, reveal the fact that about 4 to 6 per cent of all school children have defective hearing. A higher percentage is found in rural districts, a lower one in cities, probably due to better facilities for treatment.

There is a great difference between the hard-of-hearing adult and the hard-of-hearing child. The loss of hearing in an adult is fixed and, with the exception of the fenestration operation by which only a very small percentage of the hard-of-hearing population can be benefited, medical treatment is of little avail. With children this is not the case. Their power of recovery is amazing. However dangerous the popular belief that "the child will outgrow it," there may be some truth in it since spontaneous recovery from almost any disease or deficiency in childhood is not a rarity. Acknowledging this fact, we realize, however, the danger of putting hope in such spontaneous recovery by postponement of necessary treatment. Much valuable time may be lost during which, instead of improvement, the disease or deficiency may have progressed to such an extent that medical treatment can no more achieve a complete cure.

One of the difficulties in establishing necessary treatment of incipient hearing loss is the fact that a hearing deficiency in a child is very often overlooked. The following is an example of such a case:

Jane F. was a fourteen-year-old girl in the ninth grade. All through her school years she was quiet and well-behaved, with a sweet smile and a gentle, pleasant personality. Her teachers liked her so much that they let her pass from one grade to the next in spite of her poor performance. When the time came to promote her from Intermediate to High School, for which she was definitely not fitted, the school counsellor explained to her that she could not be passed with her classmates because her work was not satisfactory. During this interview the girl with tears in her eyes confessed that she could never hear what the teachers were saying in class! This girl had gone through the elementary and intermediate grades without ever being recognized as being hard-of-hearing!

This probably is an extreme case; however, it illustrates how much hearing loss can go undetected in a child.

To prevent such occurrences and to insure every child the maximum benefit of his education, as well as to guide the hard-of-hearing children with relatively slight hearing loss to their physician for an early rehabilitation, the Detroit Department of Health in collaboration with the Board of Education has for many years conducted a hearing survey in the public and parochial schools of Detroit to detect the students with hearing deficiencies.

For screening purposes a mass hearing test is given with the aid of the G.E. 4A Audiometer. This is a phonograph with forty receivers with which forty students can be tested at the same time. On a disc a male and a female voice are recorded speaking numerals of two and three digits. As the record is played, the voice becomes gradually fainter until the normal threshold of hearing is reached. The children are asked to write down these numbers as they hear them. As this test is not given in a soundproof room but in an ordinary classroom, the always present background noises are taken into consideration and a 10 per cent hearing loss is permitted.

All children with a hearing deficiency, as disclosed by the screening tests, are asked to appear with their parents at the Clinic for Hard-of-Hearing Children for extensive individual testing. The clinic is located in the Day School for the Deaf, where specially trained teachers and an otologist conduct the examination. This clinic is purely diagnostic; no treatments are given, but the children are referred back to their physician if treatment is indicated.

At the clinic the history of the child's health is taken, with special reference to heredity and diseases of the ear in order to establish a possible causative factor of the hearing deficiency. One of the standard questions is, "When was the hearing defect first noticed?" The answer to this question, nine times out of ten, is "not noticed." Unless the child has an advanced hearing loss—

usually about 30 to 40 decibels or more—the mother does not realize that her child's hearing is subnormal. And this should not be surprising since we are measuring the normal threshold of hearing to discover a deficiency. But the intensity of the average speaking voice is approximately 60 decibels above the threshold of normal hearing and should be heard at a distance of 80 feet and the whispering voice at 40 feet; and parents, as a rule, do not whisper when talking to their children. Occasionally, a mother will state that her child hears well although hearing tests have disclosed a considerable loss of hearing. Actually, when the mother talks to her child, he will respond like any other child with normal hearing. But when the mother is asked to turn her face away from her child while speaking, the child will not respond. He was lip reading all the time, although his mother was not aware of this fact.

At the clinic the pure-tone audiometer and the speaking voice are used for testing. The great advantage of the audiometer is that we can test with it the whole range of the scale between 128-8192 vibrations. This is important because many a hearing loss starts below or above the range of the speaking voice which is between 512-2048 vibrations. The other advantage of the audiometer is that the intensity of the sound can be increased and decreased at will until the threshold of hearing is found and the result can be charted exactly. The audiometer measures the hearing in decibels.

In order to determine how well the child can hear speech and not pure tone, the audiometer test is followed by the speech test using the quiet conversational voice and the whispering voice. For practical purposes the children are tested from a distance of twenty feet. The ear to be tested should be turned to the examiner and the other ear closed with one finger, precaution being taken to prevent lip reading. If the child does not understand the examiner from twenty feet, the distance between the examiner and the child is reduced until the child can understand the spoken word. To round out this examination the child is tested for his ability of lip reading. Some children are natural lip readers and master spontaneously this art, which for an adult is usually hard to acquire.

When the hearing tests have been completed, the child is examined by the otologist. The advance in therapy is well illustrated in this examination. We seldom see any more large heart shaped perforations of the eardrum following measles and scarlet fever which were so prevalent before the era of chemotherapy. Nerve deafness following diphtheria or meningitis is also very rare. The largest contingent of hearing loss as seen in the clinic is conductive deafness due to infringement of adenoid tissue upon the opening of the eustachian tube.

Of 573 children examined in 1946-1947, 189 had enlarged tonsils and adenoids requiring surgical removal. Only sixty of these were found to have suppurative otitis media, and fifteen children had a nerve deafness. It is remarkable that fully one-third of this group had large tonsils and adenoids. Some fifteen or twenty years ago, the tonsillectomy and adenoidectomy operation was considered a necessary part of a child's experience in America—at least in the cities. Today, it seems that the pendulum is swinging in the opposite direction toward the other extreme and it is often not being performed when needed. Since a normally functioning eustachian tube is essential to good hearing, the removal of the adenoid tissue obstructing the opening of the eustachian tube is the first requisite in the re-establishment of normal hearing. A properly performed tonsillectomy and adenoidectomy operation, when indicated, is the first and most important requirement toward the rehabilitation of the hard-of-hearing child. Therefore, the child with large tonsils and adenoids is advised to have them removed, and the parents are asked to return to the clinic with the child after the operation has been performed to recheck the hearing. It is gratifying in most cases to find a marked improvement of hearing after the operation.

The audiometer charts in Figure 1 illustrate the average case.

Unfortunately this long proven recommendation is not always followed, sometimes with disastrous results, as illustrated in the following case:

R. D., five years old, was examined at the clinic in March, 1944. He had an overall hearing loss of 12 per cent in both ears. His tonsils, adenoids, and cervical glands were greatly enlarged, and a tonsillectomy-adenoidectomy was recommended. Four lears later he was again seen at the clinic with the following report of his teacher: "Attention, poor. Application, poor—does not follow directions. The pupil's social reaction to group activities is poor." He still had his large tonsils and adenoids, and his hearing test at that time showed a

hearing loss of 37 per cent in his right ear and 28 per cent in his left.

According to our experience, some parents misinterpret the widely publicized but still controversial relationship between tonsillectomy and sometimes lymphoid tissue will invade the eustachian tube itself, where it is not accessible to surgical removal. For such cases he recommends radium treatment, which will destroy the lymphoid tissue without any deleterious influence upon the

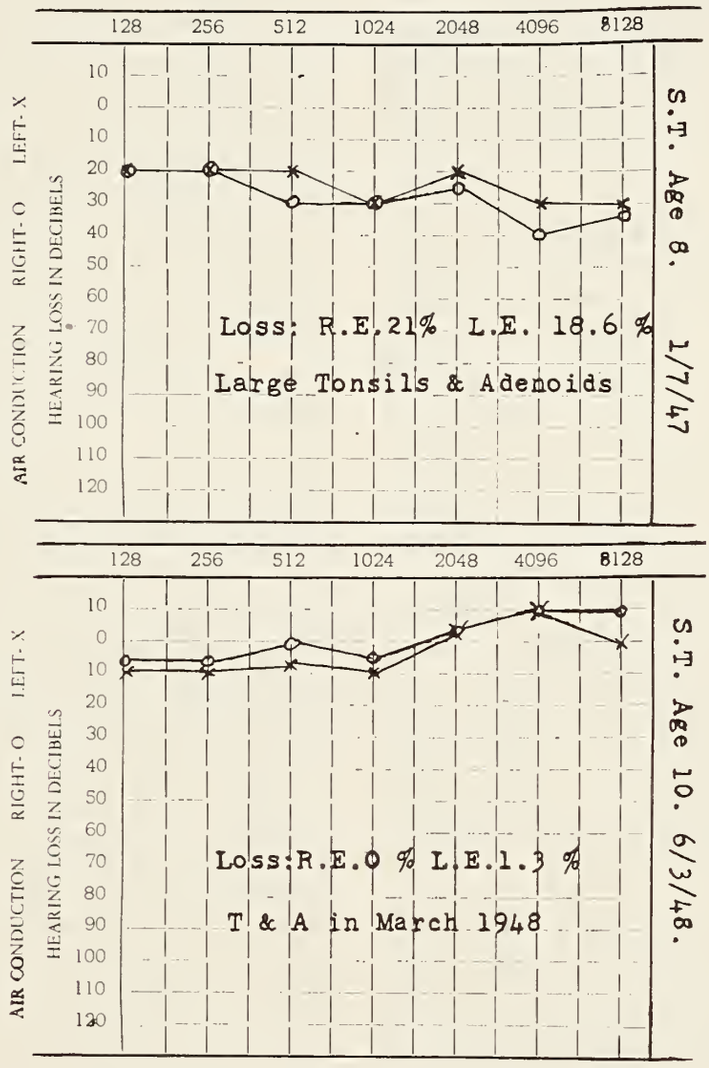

Fig. 1

allergy and that of tonsillectomy and poliomyelitis. They, therefore, reject all suggestions for tonsil operations. And it must be admitted that not every tonsillectomy-adenoidectomy operation will result in an improvement of the child's hearing. Due to the anatomic configuration of the nasopharynx, sometimes even a perfectly performed adenoid operation will fail to remove all the lymphoid tissue around the opening of the eustachian tube. Nasopharyngeal lymphoid tissue is generally recognized as an important factor in the causation of the common cold, acute infections of the middle ear, or hearing loss due to insufficient aeration of the eustachian tube. Crowe of Johns Hopkins calls attention to the fact that surrounding normal tissue. This treatment has been in general use for several years, and there have been excellent results following such procedure where tonsillectomy-adenoidectomy alone failed to clear up the pathologic condition.

In allergic children the possibility of an edema of the mucosa of the eustachian tube has to be considered, and for such children an allergy investigation and vigorous treatment are recommended if allergy is suspected to be the underlying cause of impaired hearing.

As a matter of course, any middle ear infection should be cleared up. In a case of chronic middle ear suppuration, the serious nature of the disease

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Family Guidance

By John M. Dorsey, M.D.
Detroit, Michigan

"Our increased insight into the importance of the family becomes a responsibility; we must communicate this not only to those who deal directly with emotionally disturbed people, but also to all those who are concerned with making the community a better place for the family to live in, including those in administrative offices." —Helen Ross, *Journal of Social Casework,* February, 1949.

AS THE MEDICAL world has grown older, its theory of health has grown better and a correspondent improvement in its practice of health is observable. During the war military psychiatric screening demonstrated the importance of family living for the mental growth of the individual. Since the war, psychiatry in industry is attesting further the basic significance of family relationships for the development of each family member's mind. The London International Congress on Mental Health was united on the point that the individual's attitudes are based solidly upon his family experiences. The Social Committee of the United Nations General Assembly has taken a position of greatest consequence for our medical world: "The family is a natural and fundamental unit of society and is entitled to protection by society and the state."

This measure of the meaning of "family" is well known to each and every one of our family physicians. The veteran family physician has learned from experience, has had his mind disciplined, to recognize the significance of family living for individual welfare and hence for public health. He is disposed from observation and affection to attend to his patient in terms of the nature and needs of his patient's family. Whether we are ready to recognize it or not, truly it appears that all of us practitioners of medicine are, in a deep sense, family physicians. Whatever we accomplish in terms of any member of a family produces far-reaching effects upon every other member of the family. Every doctor-patient relationship is, by direct extension, a doctor-family relationship.

Research at our Detroit McGregor Center, a hospital for rehabilitation and health education, is clearly demonstrating that the mental organ is critically involved in illness of every other part of the body, and therefore, that psychotherapy is critically involved in all medical practice. By psychotherapy is meant the systematic exclusive use of the *humane* medical presence as therapeutic agent. Our sciences of psychology and of psychopathology have suffered under the inability to localize mental events. Now our accumulating insights made possible by the study of the psychic integrative process, occurring both in treatment and in personality development, can lay this ghost. Man will continue to suffer lying, stealing, killing, beliefs in persecution, and all such self-deception, until his mind grows to attend to the self-reference of all his behavior. Or he will continue the common practice of acting as if he can do the right thing for the wrong reason. Comprehension of the full measure of the meaning of human "individuality" is all we can know, and all that we need to know, for the nicest localizations of all human meaning. The scientific discovery of the localization of mental function and dysfunction, respectively, in mental organization and disorganization explains the difficulties of investigators in mental fact-finding. The investigator's own psychic integration is indispensable to this understanding of the distribution of meanings in the self order.

There is absolutely nothing esoteric, or mysterious, about psychiatric treatment: the medicine of humanity. For example, as a regular accompaniment of all illness aptly called "attacks," the patient is beset by destructive attitudes of disesteem. Thus he is forced to the consideration of a false measure of human worth, thereby suffering the pathological process that is pathognomonic of all mental illness: self-deception. This particular self-deception is of the most disabling kind because it extends over the whole body of the mind, over human individuality itself. Psychopathology may be most accurately defined as the study of imposture; so psychological medicine may be most accurately defined as the love of the truth. For the specific antidote to our general practice patient's abnormally activated feelings of personal unworthiness and insecurity, the physician prescribes his own accurate deep appreciation of human worth. The experienced physician loves his patient as himself and knows that his example is in all of his prescriptions. Such is the nature of specific psychotherapy, whether practiced in general medicine or in psychoanalysis.

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Investigative studies on general practice patients at McGregor Center reveal the prime significance of family life for individual, and hence, public health. Husband and wife, being their offspring's first physicians, may look to medical education for help in treating him well. The immature mind is most susceptible to demoralization, that ill circumstance of self-disrespect that begets illness.

There is no word of deeper meaning for man than "home," where each of us had his start. The wise old grandmother of one of my friends held that the letters of the word home should stand for "harmony of mind everywhere." Domestic events quicken the interest of every man. Our Emerson long ago claimed that the heroism which would mean the most to us would be that of a domestic conqueror who would show man how to build a wholesome home. Jean Paul F. Richter noted, "Every new educator effects less than his predecessor; until, at last, if we regard all life as an educational institution, a circumnavigator of the world is less influenced by all the nations he has seen than by his nurse."

Let everyone ask himself: what is my idea of domestic well being? Does it depend alone upon wealth? No man in his right mind would make that claim. Certainly a "living wage" is a necessary basis for all living together, and as long as our very livelihood is in question, our self-preservation demands its solution first. Beyond livelihood, what is it that we owe man? We owe man self-growth, self-discovery, self-acceptance, self-realization, self-fulfillment, self-possession. We owe man himself. To quote Emerson once more, "If he is sick, is unable, is mean-spirited and odious, it is because there is so much of his nature which is unlawfully withholden from him." To learn how to help man to help himself is the ideal of the best social service, an ideal that is ineffectual except to the extent that the social worker is able to live it. As Humboldt observed, "The first law of true morality is 'educate yourself' and only its second one 'influence others by what you are.'"

We have never found any other social agency for promoting wholesome self-expression that is an improvement upon the family circle with all of its stirring events. In all of the some 800 peoples of the earth, the family exists as the unit of social life. Find out what kind of a house is kept by a family and you have the best basis for deciding what kinds of citizens that house is producing. Men's minds tend to be as well-arranged and as ill-arranged as the homes they have lived in.

Our American family is the basic unit of our American culture. It would help us most to study each and every home to find what set of attitudes it specializes in. Our progress as a nation among nations depends basically upon the kinds of homes our families operate. Our democratic government, we contend, is preferable to all other kinds of governments in the degree to which it respects the dignity of the individual. By developing "individuality" we mean, specifically, integrating the mind. What is a home for, if not to help every one of its members to grow to full self-respect? Our homes provide the infant and child preschool services indispensable to the cultivation of individuality.

The union of husband and wife makes possible a greater degree than ever of mental integration for each mate. This marital union exists within each mate, not between two creatures. Marriage is the sign of readiness of a man and woman to make considerate service to each other no longer temporary and fitful, but constant. Preparation to be able to take advantage of the integrating opportunities of matehood is an absolute necessity. For the most part this preparation takes place in the home, where each member develops his understanding of manhood and womanhood. Nothing else asks so much of a man and woman as being true mates. Moreover it is impossible to be a good parent except through being able to be a good mate. Striving to be a good husband or wife is the hardest but most wonderful work in the world. This work concerns the progressive cultivation of ever wider ranges of love, most useful exertion that brings with it insight regarding the mutual advantages in sharing. Hence it is that the helpful rather than harmful use of jealousy has such a very powerful role in wholesome family living.

Psychiatrists are frequently asked: where shall we begin in our efforts to raise the level of mental health in the community? The answer is: begin at the beginning—each of us with his own self. The greatest object lesson that our husband and wife can offer their offspring is that of being an effective husband and wife. Thus they revere all humanity. The husband and wife who have been able to respect their own, and hence each other's, selfness, sense the need to revere the individuality of the infant growing to childhood, and thereby

have been able to take the best care of the youngster's growing mind. Children of these mates have been given the best preparation for "taking on" the larger home, the community.

Nothing, absolutely nothing, can ever dim the glory of being human. When psychiatrists try to separate the wheat from the chaff, they find that adult mental health means mental greatness. Mental greatness is the product of mental growth that is self-acknowledged. The psychiatrist does not make the patient great, but rather tries to help him to admit his greatness, to acknowledge his wonderfulness as a human being. The husband and wife who can constantly, and ever tenderly, by their own examples, help their stumbling and falling offspring towards the true assessment of what it means to him to be human, are providing him with all of the mental growth opportunities. Being good to one another is being well with one another. And none deserves so well of the world as a good husband or wife.

There has always been, there is now, and seemingly there always will be suffering in the world. Mental endurance and mental health are closely related. How best to limit suffering and to turn it to account are the problems ever pressing for solution. Death, accidents, operations, illness, divorce, desertion, separation, any and all of the "burdens of existence," may make for the insupportable personal strains in the husband and wife that offer the infant only a hopelessly discordant, a "broken," home. Unwholesome family life provides an apprenticeship for community living that is extremely dangerous.

Husbands and wives do well particularly to ask themselves if their spirit of domination is usefully in mind. Whenever we are not able to be good-natured in our training of children, it is an infallible sign that we need help. Truly, to be able to be "good and angry," both at the same time, requires mental maturity. The need for control, the mastering tendency in human nature, must be constantly under observation. Tyranny, always blind, is the corpse of liberty. And dead liberty is always gangrenous.

The whole idea of domestic service needs to be kept on its strongest foundation, the furtherance of culture through the development of individuals. The home is mental integration's nursery, the cradle of democracy. The democratic husband and wife are the just stewards of the community's youngest fellow citizens. They cultivate the child's "belonging to them" as a step in his learning how to belong to himself in the community. Society needs most the advances in human culture that democratic family organization can bring to it. Society is still sick with many ills of anarchy and tyranny, is still far from the truth of representative government.

The most essential element in any home is love of truth. The habitual, that is, the constant behavior of parents impresses children as truth far more often than do the parents' occasional precepts. It may take rare wisdom to decide, of all that is eternally true, what is also currently good for a human being. In fact, the hardest homework is that of wisely discovering and wisely dispensing truth in terms of the youngster's readiness for it. At last we are instituting family-living instruction in our schools and their extension divisions.

At McGregor Center we are discovering the need to center our health education work in the providing of help to husbands and wives.

All inhumanity of man to man is traceable to self-love, outraged self-love. Only with this insight can mischief be understandable. How to live well is the same idea as how to love well. Love as the guiding principle is the center and circumference of being. Little wonder that the law of loving our neighbor as being ourselves has been unfolded as divine. The only erring thought that acts injuriously upon humanity tissue is hate that is not acceptable to love. The allness of truth demands the allness of love.

The particular size and form of the family and the individual's place in it are consequential. For example, an only child tends to miss companions, the oldest child tends to feel older than his peers in later life, the youngest child tends to feel younger than his peers in later life, the middle child tends to seek attention outside his family; and so on. The "only" boy, the "only" girl, the twin, the step-child, the adopted child—each must contend with his characteristic family living features.

It was said of Israel, "The fathers have eaten sour grapes and the children's teeth are set on edge." Family guidance is of special use because everyone's first reactions to frustrations have primitive elements in them, and the various members of the family are often too near to their trying home situations to get useful perspective upon them, without outside help. Yet, who can deny

that it is dangerously easy to do more harm than good through unfortunately timed and geared community interference with the family? If consecration is not the result of our good intentions, desecration is. The democratic community must respect the individuality of every home or defeat its own purpose. Infant and child guidance necessitate family guidance. Familial equilibrium is maintained in part at the expense of every infant and child and adult in it, and that equilibrium is disrupted by any invaders, for whatever alleged reason. Even the successful treatment of a child upsets the balance of the family and hence calls for special help.

We may be startled by the strength of the health claim for humane behavior, and it is well to ask ourselves why it seems so surprising. Demoralization is caused by ignoring the self feeling that alone can render the help needed. To possess the enlarged power conferred by mental integration is to benefit from the fuller measure of individuality. The healing influence of truth is indispensable for the development of the strength of man's high mental stratum. To ignore it as of little use in diseases is a costly error. Self-reliance is never more needed than during an attack of illness. The only chance that the body has for good government is that its mental part be well. With the most radical reliance on selfness is associated the greatest healing power. Confidence reposed in the power of integration to beget integration needs stronger supports and higher recognition. The only way in which I have been able to help any patient is specifically the way determined by my mind's having been disciplined to fuller acceptance of selfhood than that achieved by my patient. The demands of selfness are mental, and more than all others, the mental agent is related to human progress. The supremacy of the mental part of the body is seldom respected, but only through this discernment can man see himself as unfallen. Human life, manness, is quickened by being recognized. Inaccurate notions of self misgovern respiration, digestion, circulation, metabolism. It is not a decree but rather an observation that the mind forms important conditions of other parts of the body. Is it not understandable that stomach forces might vie with mental forces just as there might be sibling or sibling-parental rivalry?

To acquire experience that is not assimilable as self-experience is to eat the fruit of the tree of false knowledge. A trouble with most of our books on health is that they are not correctly enough centered in self for the reader, and hence further the development of the unreality feelings. What the mind takes in without the self's owning is the material of disease that furthers the morbid process of depersonalization. We are all like Adam, being required to name everything that we observe. When we do not give everything our own name, we lie. The mind can be educated to help rather than harm the rest of the body. Because it holds the issues of life, it is essential that its various functions work harmoniously. It is easy to be misled by what seems for a time to benefit the patient. But self-deceiving mental forces can work only ill effects. When one's false measure of self is corrected, the whole individual receives an access of health. Attention (observation, study, investigation, all individual research) expressed with its true self-reference promotes self-growth. It is a misfortune when self-growth is not the acknowledged benefit of academics of every sort. It is the incorrect view of self that depreciates the importance of truth and accounts for sincerity being most difficult of all.

The general earmarks of the superior family life might be summed up in the following six terms. Superior family life is the product of a husband and wife each trying to grow up enough mentally to be able:

1. To recognize both the greatness of their privileges with each other and the greatness of their responsibilities in terms of each other. Such a husband and wife will realize that their chances for happiness are in each other's hands and that it behooves each most to aim at his own betterment, his own improvement.

2. To recognize self-possession as mankind's greatest good. Self-possession means just what it says: the awareness of possessing one's own self. Such a husband and wife will enjoy beneficial insight about their illusion that their children belong to them. Each member of this family can call his soul his own.

3. To realize that their own mental health is not vouchsafed but must be earned and constantly maintained. Such a husband and wife will use their own precious capacities for truthfulness and dependence to be constantly "on the lookout" for the right kind of help. They will study the facts about how the mind develops and thus

provide a growth medium for their youngster in which to develop mentally.

4. To attend to being both lowly wise and high principled. Such a husband and wife will guide their infants and children to higher levels of genuineness away from the miraged heights of hypocrisy. Such a husband and wife will be aware of the important life forces and interests.

5. To represent examples to their children and community of the humanizing influences of love. Such a husband and wife will constantly nourish and wean their growing offspring to fuller and fuller home-felt, self-felt, appreciation for all that it means to be human.

6. To cherish our democracy because of the principle for which it stands: reverence for the dignity of human individuality. Such a husband and wife, in patterning their home rule after the humanity-representing Constitution of our country, will protect and further the integration of each and every member in the family.

To sum up then, the worst mistake of a home is its inability to respect the true nature and needs of the infant born into it. What makes a successful home is the understanding that Providence intended the growth of the human being from infanthood to adulthood to be the gradual growth that it is, requiring, and thus insuring, the development of great preparation, great love, great patience, great gentleness, great moderation, and great perseverance in the husband and wife.

In conclusion, it is understandable that each one of us husbands and wives daily becomes weary in well-doing. It is disheartening not to be able to see immediate good results of our efforts. Here the psychiatrist can bring us two encouraging and reassuring truths from his experiences. First, it is never too late to start helping ourselves more. Second, a helpful hand is never, not even once, lifted in vain.

JMSMS

THE CONSTITUTION

It has been said "you cannot eat the constitution." Even so, the present plight of European countries, including Great Britain, indicates that you can't eat without it. The constitution was drawn and adopted in order that we might, forever, have turkey for Thanksgiving.—*Journal of the Oklahoma State Medical Society,* January, 1950.

REHABILITATION OF THE HARD-OF-HEARING SCHOOL CHILD

(Continued from Page 91)

should be explained to the parents, and the danger in neglecting the proper treatment not only to the hearing but to life itself should be pointed out in definite terms.

According to the degree of hearing loss, a child may be left in his regular school without or with, if indicated, instruction in lip reading. Lip reading is one of the most valuable aids in overcoming the handicap of hearing deficiency. Since a child learns lip reading so much easier than an adult, the study of lip reading, especially in cases where a progression of hearing loss is possible or probable, is of the utmost importance.

Children whose hearing deficiency has advanced to a point where they cannot make satisfactory progress in regular schools are admitted to the Day School for the Deaf. These children fall into two groups, those who are seriously hard-of-hearing and the totally deaf children. The hard-of-hearing students get their education by utilizing the remnants of their hearing with the help of individual and group hearing aids, through amplification, by stimulating and salvaging the residual hearing, speech training, and lip reading. These children are kept in the Day School for the Deaf only as long as their handicap necessitates special education. As soon as they are able to pursue their education under normal conditions, they are returned to their regular school.

The totally deaf children who have never heard sounds and consequently never learned to talk are taught to speak through the painstaking, ingenious method of oral training. Their educational rehabilitation is in the hands of specially trained teachers who are able to restore these children to normal living.

Conclusion

Many of the pathologic processes in the child may be arrested and complete restoration to normal may result. The physician's function and duty is to recognize the hearing deficiency early and to establish the necessary treatment.

Bibliography

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2. Detroit Department of Health: Report of Audiometer Testing in Detroit Schools Division of School Health Service, Detroit Department of Health.
3. Wishart, D. E. Staunton: Prognosis in the hard-of-hearing child. Laryngoscope, 57:445, (July) 1947.

Personalized Therapeutics

Public demand for medical services has increased markedly during the past half century. The young doctor of medicine no longer waits hopefully for patients through a long "starvation period." While it is still impossible for one to become legitimately wealthy solely through the practice of medicine, every competent physician is assured an ample livelihood if he chooses to apply himself. And without pausing for extensive statistical analysis, it can be stated definitely that this increased public response is due at least as much to a public awareness that more extensive medical services exist today, as to any recent change in number of physicians per capita.

The resulting partial liberation of the doctor from his former status as economic slave to his practice has in turn contributed to the quality of medical services. Increased exchange of technical information and cooperation within the profession as well as improved standards of education and practice are merely two of the more obvious consequences. But the physician must remember that while increasing demands for his attention attest to improved quality in the profession, they are also a tacit warning that improvement must continue.

Possibly the greatest opportunity for immediate medical improvement today lies in what for lack of a better term might be called "personalized therapeutics." Although reasonably precise and scientific methods are more available than ever before in every facet of medical practice, the patient has not forgotten the more comfortable though empirical approach of the family doctor of yesterday. Requirements of modern medicine have decreased time available for becoming acquainted with the individual patient, and specialized medical practice has increased sharply, but treatment of the patient as an individual rather than as a mere pathological condition is still necessary. The doctor of medicine who conveys to every patient an impression of personal interest and understanding, who maintains thorough patient histories, and who diagnoses with extreme care where personal problems may be contributory factors, will reward both himself and his profession.

W. E. Barstow M.D.

President, Michigan State Medical Society

President's

Page

Editorial

GREETINGS FOR 1950

WE WISH a Happy New Year to all of our members and readers. An intensively active year has passed, and it is well to consider the prospect for the year to come.

The year 1949 saw many assaults upon the theory of independent private practice of medicine. They have mostly been weathered. Probably the most dangerous threat we had to face was the President's Reorganization Plan No. 1, which went down to defeat.

Many bills were introduced into Congress, which if enacted into law would have meant taking over in part the practice of medicine as a government function. The major attack, the Administration bill, known for years as the Wagner-Murray-Dingell Program, is not now especially active, but seventeen Federal bills were introduced aiming to set up various phases of the program. Together or separately, they would have accomplished the same purpose.

On the state level, sixteen states had seventy-one bills introduced tending to bring about socialized medicine. Another year's legislative sessions are upon us, both national and state. We know what to look for on the national level because we have been observing that for many years, but on the state level an increase in one year from forty-two bills in 1948 to seventy-one in 1949 points very definitely to the efforts being made to carry out the national Socialism Program of which socialized medicine is just one feature.

For Medicine, the year 1950 must mean a period of vigilence. We must be on the alert, with our eyes on both national and state political activities.

VICIOUS PUBLICITY

DURING the year just passed, we have commented on numerous occasions on the many newspaper and magazine articles, written with great skill, but carrying in their contents an implication that all is not well in the field of medicine, and that socialism in medicine would be good for the people.

Harper's Magazine for November, 1949, contained an extremely libelous article on "The Rise and Fall of Dr. Fishbein." It was a sensational report of the action taken by the Board of Trustees of the American Medical Association in retiring the Editor. We ignored that article, believing that enough bad publicity had been obtained. *Harper's* announced an article for December by the same author, Milton Mayer, "to trace the tortuous path of the A.M.A.'s retreat before the advancing tide of medical insurance plans."

This article has appeared and is one of the most malicious attacks on the A.M.A. and the medical profession in general that we have ever seen. The article is confusing in that it portrays a fight against something that we are not fighting. It fails to point out what medical insurance is, and that there are almost as many different insurance plans as there are advocates. It places the profession against all of them, not against some and for others.

In the first article, the Michigan State Medical Society gets credit for sending a delegation to England to find out at first hand about British state medicine, and "ultimately established a voluntary membership plan for medical care in the state." The second article says, "though the A.M.A. succeeded in eliminating medical provision from the Social Security Act of 1935, the California Medical Society had already established an insurance plan." Also: "Three years ago the Blue Shield plans for limited medical care were started." Twice in the article, the Blue Shield plans are given only three years of existence. What do they think Michigan Medical Service has been doing for ten years?

The *Harper's* article gives an entirely erroneous opinion of the position of the medical profession on the whole plan of medical insurance. It quotes actions of the House of Delegates and the Board of Trustees of the A.M.A. as opposing continuously for many years the medical insurance program, in spite of the fact that the A.M.A. has just issued Bulletin No. 70 by Frank G. Dickinson, Ph.D., "A Brief History of the Attitude of the American Medical Association towards Voluntary Health Insurance," which says the A.M.A.

has never opposed the development of voluntary sickness insurance plans as they exist today.

Quotations in the *Harper's* article are inaccurate. It was the Michigan State Medical Society which at its annual session in 1933 proposed a workable voluntary medical insurance program. This plan was about to be tried by the Calhoun County Medical Society when state officials stopped further action because the plan was counter to the insurance laws of the state. The plan was taken to California by our ex-secretary and became the incentive at least for the California plan established in 1939. *Harper's* used to be an accurate magazine. Some now feel its sensational misstatements make it unworthy of reader notice.

PUBLIC SPEAKING

THE PRESENT interest in social conditions in England makes the story told by a recently returned traveler most stimulating. A recent lecture by a retired professor of English Literature told of the present miserable economic chaos in England. The professor was born in Canada and has taught for forty years. He painted a picture of distress and discouragement under the Socialistic Labor Government now in England. He predicted a new election before July, 1950, and reported the hopes of many Britishers that at least a few seats could be changed from Labor to Conservative and thus force a coalition government.

He mentioned socialized medicine, told of its abuses whereby people have been going to England to get free glasses and free obstetrics. He reported that the program has been so terrifically expensive that the Government is now demanding a certificate of citizenship before anyone can benefit from this "free" treatment. He mentioned that America is paying for this British experiment in socialized medicine, but he made one statement to which we disagreed. He said that the Doctors and Dentists in Great Britain are reaping a great harvest; that their offices are completely filled with patients, that the government is paying them on a fee basis 100 per cent of charges; the same as they were receiving previous to this experiment, which they were not always able to collect.

After the meeting we challenged his figures. He was of the impression that the doctors were collecting regular fees for every service they render in England. He did not know of the panel under which the doctor works or of the payment of fifteen shillings per year per patient. We are reporting this incident because here was a well-trained observer making a shrewd report of socialistic conditions which he was seriously critizing. Yet in the field of medicine, his information was not only inaccurate, but dangerous in its implications when mentioned in public speeches.

Since this editorial was prepared, we have received a letter from the professor as follows:

"I've read the letter you gave me. It has some valuable statistical information. Thank you for it. My information re the doctor's charges being paid by the government is wrong. I am grateful to you for putting me in the right. I talked with my cousin at Windemere, a University of Toronto orthopedist who is over there for a year's work observing surgical work with children, also with Dr. Hall at Windemere who is an outstanding physician, and who is doing well professionally; also with a Dr. Sofaer, a specialist in psychiatry in London. My impressions came from these three. Hall is making a lot of money, owns an elaborate yacht.

"I shall not include the M.D.'s next time, for I conscientiously do not wish to misrepresent. Thank you for correcting me so unobtrusively."

We believe this story points to a program which, as medical men, we must all be prepared to carry out. We must correct misinformation which is given us and the public in general sometimes, we admit, inadvertently.

SOCIALISM FAILING?

NEW ZEALAND has recently voted against State Socialism after fourteen years' trial and has gone back to a Liberal-Conservative form of Government. The Labor Government has evidently proven too expensive and entirely unsatisfactory. One of the main factors to bring about this change has undoubtedly been the unfavorable reaction to socialized medicine.

Next came Australia where the Labor Party was defeated by a very large margin, thus ending eight years of a Government which was unable to live up to its promises. The former Conservative Premier and his co-workers are now in authority. Here are two nations "down under" which have thrown out State Socialism after a trial of several years. This is a rare procedure, because usually socialistic governments are thrown out by revolution, rather than by vote.

The Great Britain part of the British Commonwealth is due for an election in July, 1950. Britain will then have had a Labor-Socialist Govern-

ment for five years. The medical profession will have been socialized for two years. The experiment in England has not been successful, especially as it relates to medicine. Every health service was to have been free, including wigs, spectacles, false teeth, and medical prescriptions. However, the expenses of providing these "health necessities" were so great that the English are now demanding proof of citizenship for the wigs and spectacles and are demanding a minimum of fourteen cents for each prescription filled.

The socialistic form of government has endured in Germany for eighty years; in France for over twenty years and is quite prevalent in Italy with no signs of change so far. The break in the British Empire "down under" seems to promise that the world is realizing and appreciating the failures of this form of government. Rugged independence, an ability to take care of oneself, and a belief in commensurate returns from one's work and efforts, rather than equal benefits from group efforts, may bring about a future change.

The unfortunate part of British and European Socialism at the present time is that this experiment is at the expense of the United States. We are paying for British socialized medicine. We are paying for the Socialistic Government in France and other countries.

The results of the last few weeks' elections are very encouraging. We hope the crest of Socialism has been reached. We know the Truman Administration is using every devise of propaganda to bring us to a Welfare State. Radio commentators are now charging almost every day that false and unfair methods are used to encourage socialized medicine.

President Truman sent Oscar Ewing to Europe "to study Compulsory Health Insurance in action." The British doctors charge that he made a report in London but admitted he had not visited a single clinic where the plan was being used—just talked with its advocates.

Socialism is hopefully failing abroad—just at the time it is being most forceably advocated for us.

ANNUAL DUES

THE HOUSE of Delegates of the American Medical Association, at the suggestion of the Board of Trustees, amended the By-Laws, eliminating the provision that membership in the County and State Medical Society carries with it membership in the American Medical Association, and substituting the establishment of annual dues, which the member shall pay through the State and County Medical Societies. Delinquency for a year is cause for dropping the name from the rolls of membership, if following a notice of delinquency from the secretary the dues are not remitted within thirty days.

The dues for 1950 are fixed at $25.00, but this may be changed each year as the Board of Trustees may determine. The amount of $25.00, however, is the top limit established. The annual dues for 1950 of $25.00 carries membership, but not Fellowship. Fellowship is issued upon request with the payment of an additional $12.00, for which THE JOURNAL is sent to the Fellow. Every member of a County and State Medical Society who subscribes for THE JOURNAL may have his name placed on the roster of Fellows by request.

There are about 144,000 members, about 72,000 Fellows, but about 138,000 total subscribers to THE JOURNAL. In other words, nearly half of our members subscribe to THE JOURNAL and pay the fee, but fail to become Fellows simply by not requesting that designation when the subscription is sent to Chicago.

MSMS

ON THE RUN . . .

Spinal-cord symptoms appearing in the patient with pernicious anemia constitute a medical emergency.

. . .

Neuroblastoma is the most common neoplasm of the abdominal cavity in early childhood.

. . .

Thyroid compression of the esophagus occurs when the gland is fibrous, hard and invasive or when it is situated substernally.

. . .

While 40 per cent of cases of myeloma have normal serum protein levels, 99 per cent show an elevation of the serum globulin.

. . .

To evaluate completeness of removal of a chorionepithelioma or mole, repeated quantitative urine assays for gonadotropic hormone must be carried out for an extended period.

. . .

When diabetes and tuberculosis co-exist the diabetes is discovered before the tuberculosis in 65 to 80 per cent of the patients.

. . .

Suspect potassium deficiency in the patient who lapses into stupor after partial recovery from diabetic coma, shows diminished muscular tonus and develops shallow, rapid respirations.

WILLIAM S. REVENO, M.D.

Fourth Annual
Michigan Postgraduate Clinical Institute

Book-Cadillac Hotel, Detroit

March 8, 9, 10, 1950

P. L. LEDWIDGE, M.D., Detroit, *General Chairman*

PROGRAM

Wednesday, March 8, 1950

A.M.

8:00 **REGISTRATION—Fifth Floor**

EXHIBITS OPEN—Fourth Floor

FIRST ASSEMBLY

Grand Ballroom, Book-Cadillac Hotel

W. E. BARSTOW, M.D., St. Louis, *Chairman*

8:50 **Welcome**

W. E. BARSTOW, M.D., St. Louis
President, Michigan State Medical Society

J. J. LIGHTBODY, M.D., Detroit
President, Wayne County Medical Society

9:00 **"Present Status of the Treatment of Hyperthyroidism"**

GEORGE CRILE, JR., M.D., Cleveland, Ohio
Member of Surgical Staff, Cleveland Clinic

9:20 **"Discussion of Radiation Therapy for Benign Uterine Pathology"**

J. MASON HUNDLEY, JR., M.D., Baltimore, Md.
Head of Department and Professor of Gynecology, University of Maryland School of Medicine and College of Physicians and Surgeons

9:40 **"Management of the Diarrheas of Infancy and Childhood"**

ROCKWELL M. KEMPTON, M.D., Saginaw
Chief of Pediatrics, Saginaw General Hospital and St. Mary's Hospital

10:00 **INTERMISSION TO VIEW EXHIBITS**

11:00 **"The Adrenal Cortex in Health and in Disease"**

JEROME W. CONN, M.D., Ann Arbor
Associate Professor of Internal Medicine and Director of Division of Endocrinology and Metabolism, University of Michigan

11:20 **"The Foot in Infancy and Childhood"**

HERBERT W. HARRIS, M.D., Lansing
Attending Orthopedist Sparrow Hospital and St. Lawrence Hospital, Lansing; Civilian Consultant Orthopedic Surgery, Percy Jones General Hospital, Battle Creek

11:40 **"How to Investigate the Allergic Patient"**

HOMER A. HOWES, M.D., Detroit
Private Practice of Internal Medicine and Allergy

P.M.

12:15 **LUNCHEON, Crystal Ballroom, Book-Cadillac Hotel**

G. T. MCKEAN, M.D., Detroit, *Chairman*

1:15 **"X-Ray Diagnosis of Diseases of the Chest"**

LEO G. RIGLER, M.D., Minneapolis, Minnesota
Professor and Chief Department of Radiology and Physical Therapy, University of Minnesota; Chief Department of Roentgenology, Minneapolis General Hospital; Senior Consultant Veterans Hospital, Minneapolis; Consultant USPHS

WM. E. BARSTOW

ROCKWELL M. KEMPTON

JEROME W. CONN

HERBERT W. HARRIS

HOMER A. HOWES

SECOND ASSEMBLY

Grand Ballroom, Book-Cadillac Hotel

G. H. SCOTT, Ph.D., Detroit, *Chairman*
Acting Dean, Wayne University College of Medicine

P.M.

2:00 **"Recent Advances in Dermatology"**
FRANCIS E. SENEAR, M.D., Chicago
Professor and Head of Department of Dermatology, University of Illinois College of Medicine

2:20 **"Potassium in Electrolyte Balance"**
ROSS V. TAYLOR, M.D., Jackson
Chief of Medicine Mercy Hospital, Jackson

2:40 **"The Poliomyelitis Epidemic of 1949"**
FRANKLIN H. TOP, M.D., Detroit
Director Herman Kiefer Hospital, Clinical Professor of Preventive Medicine and Public Health, Wayne University College of Medicine

3:00 **INTERMISSION TO VIEW EXHIBITS**

4:00 **"Comparative Results of Vagotomy and Gastric Resection for Duodenal Ulcer"**
WILLIAM S. CARPENTER, M.D., Detroit
Instructor Clinical Surgery, Wayne University College of Medicine

FRANKLIN H. TOP

4:20 **DISCUSSION CONFERENCE ON CANCER**

Pathology
C. I. OWEN, M.D., Detroit, Moderator
Attending Pathologist and Director Laboratory Grace Hospital, Associate Professor of Pathology, Wayne University College of Medicine

X-Ray
LEO G. RIGLER, M.D., Minneapolis, Minnesota

Surgery
GEORGE CRILE, JR., M.D., Cleveland, Ohio

Gynecology
J. MASON HUNDLEY, JR., M.D., Baltimore, Md.

Dermatology
KENNETH B. MOORE, M.D., Flint
Staff of Hurley and St. Joseph Hospitals; Syphilologist Flint Dept. of Health

Hematology
A. HAZEN PRICE, M.D., Detroit
Associate Physician Detroit Receiving Hospital; Physician Harper Hospital; Assistant Professor Clinical Medicine, Wayne University College of Medicine

Syphilology
FRANCIS E. SENEAR, M.D., Chicago

8:30 **"A Doctor Visits England"**
GROVER C. PENBERTHY, M.D., Detroit
Past President, Michigan State Medical Society
Dr. Penberthy will present facts on his recent visit to the British Isles as a representative of the American Medical Association.

WM. S. CARPENTER

Thursday, March 9, 1950
Book-Cadillac Hotel

A.M.

8:30 **REGISTRATION—Fifth Floor**
EXHIBITS OPEN—Fourth Floor

THIRD ASSEMBLY

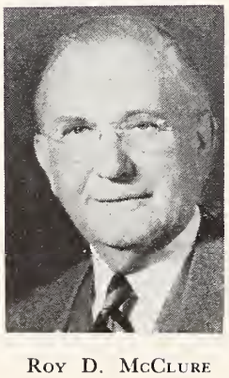
Grand Ballroom, Book-Cadillac Hotel

W. J. HERRINGTON, M.D., Bad Axe, *Chairman*

9:00 **"Abdominal Pain Without Local Organic Disease"**
WALTER C. ALVAREZ, M.D., Rochester, Minnesota
Senior Consultant in the Division of Medicine, Mayo Clinic; Professor of Medicine, University of Minnesota; Editor of GASTROENTEROLOGY

9:20 **"Surgery of the Breast"**
ROY D. MCCLURE, M.D., Detroit
Surgeon-in-Chief, Henry Ford Hospital, Detroit

9:40 **"Evaluation of Modern Advances in Obstetrics and Gynecology"**
PALMER E. SUTTON, M.D., Royal Oak
Senior Attending Obstetrician and Gynecologist, Woman's Hospital Staff, Detroit; Senior Attending Obstetrician and Gynecologist, Royal Oak General Hospital, Royal Oak



ROY D. MCCLURE

10:00 **INTERMISSION TO VIEW EXHIBITS**

11:00 "The Art of Anesthesia"
JOE DEPREE, M.D., Grand Rapids
Consultant in Anesthesia, Blodgett Memorial Hospital, Grand Rapids

11:20 "The Hospital Management of Gallbladder Disease"
E. THURSTON THIEME, M.D., Ann Arbor
Staff of St. Joseph's Mercy Hospital; Member American College of Surgeons; Instructor Medical School of University of Michigan

11:40 "The Specificity of the Vitamins and their Proper Clinical Use"
MARION A. BLANKENHORN, M.D., Cincinnati, Ohio
Director Department of Internal Medicine, Cincinnati General Hospital; Professor of Medicine, University of Cincinnati

PALMER E. SUTTON

P.M.

12:15 LUNCHEON, Crystal Ballroom, Book-Cadillac Hotel
(Chairman to be announced)
THE R. S. SYKES LECTURE

1:15 "Laboratory Methods for the Diagnosis of Malignancy"
PLINN F. MORSE, M.D., Detroit
Director of Buhl Memorial Laboratory, Harper Hospital

FOURTH ASSEMBLY
Grand Ballroom, Book-Cadillac Hotel

D. R. SMITH, M.D., Iron Mountain, *Chairman*

2:00 "Essentials in Psychotherapy"
FRANZ G. ALEXANDER, M.D., Chicago
Director Chicago Institute Psychoanalysis; Clinical Professor of Psychiatry, College of Medicine, University of Illinois

JOE DEPREE

2:20 "Preventive Pediatrics"
A. MORGAN HILL, M.D., Grand Rapids
Attending Physician and Consultant Staff of Blodgett Memorial Hospital; Consultant in Pediatrics, Mary Free Bed Guild Convalescent Home and St. Mary's Hospital

2:40—"The Treatment of Acute Otitis Media"
JAMES H. MAXWELL, M.D., Ann Arbor
Staff St. Joseph's Mercy Hospital and University Hospital; Professor of Otolaryngology, University of Michigan Medical School

3:00 INTERMISSION TO VIEW EXHIBITS

4:00 "Ophthalmia Neonatorum"
WILLIAM L. BENEDICT, M.D., Rochester, Minnesota
Professor of Ophthalmology, University of Minnesota Medical School Graduate Department, Mayo Foundation

A. MORGAN HILL

4:20 CLINICAL PATHOLOGICAL CONFERENCE
Pathology
S. E. GOULD, M.D., Eloise, Moderator
Associate Professor of Pathology, Wayne University College of Medicine; Attending Pathologist, Wayne County General Hospital; Editor, "American Journal of Clinical Pathology"
Surgery
DARRELL A. CAMPBELL, M.D., Ann Arbor
Instructor Department of Surgery, University of Michigan; Surgeon, St. Joseph's Mercy Hospital, Ann Arbor
Internal Medicine
MILTON R. WEED, M.D., Dearborn
Assistant Professor of Medicine, Wayne University College of Medicine; Assistant Chief of Medicine, Veterans Hospital, Dearborn

Friday, March 10, 1950
Book-Cadillac Hotel

A.M.

8:30 REGISTRATION—Fifth Floor
EXHIBITS OPEN—Fourth Floor

FIFTH ASSEMBLY
Grand Ballroom, Book-Cadillac Hotel

E. C. LONG, M.D., Detroit, *Chairman*

9:00 "Steroid Hormone in Rheumatic Disease"
RICHARD H. FREYBERG, M.D., New York City
Associate Professor of Clinical Medicine, Cornell University Medical College; Director of Department of Medicine, Hospital for Special Surgery; Chief of Arthritis Clinic, Hospital for Special Surgery and New York Hospital

S. E. GOULD

9:20 "Industrial Surgery Is for the Industrial Surgeon"
J. DUANE MILLER, M.D., Grand Rapids
Chief of Surgery, Blodgett Memorial Hospital

DARRELL A. CAMPBELL

9:40 **"The Use of Endocrine Products in Obstetrical and Gynecological Office Practice"**
ROBERT B. KENNEDY, M.D., Detroit
Senior Attending Obstetrician and Gynecologist, Woman's Hospital, Detroit; Head of Dept. of Obstetrics and Gynecology, St. Joseph Mercy Hospital

10:00 **INTERMISSION TO VIEW EXHIBITS**

11:00 **"The Use and Abuse of Drugs in Treating Children"**
JULIAN P. PRICE, M.D., Florence, South Carolina
Pediatrician to the McLeod Infirmary, Florence, South Carolina; Consulting Pediatrician to Dillon and Conway Hospitals, South Carolina; Secretary-Editor South Carolina Medical Association; President-Elect, Conference of Presidents and Other State Medical Association Officers.

11:20 **"An Appraisal of Methods for Treatments of Urinary Infections"**
REED M. NESBIT, M.D., Ann Arbor
Professor of Surgery, University of Michigan Medical School; Chief of Urologic Service, University Hospital

11:40 **"Important Concepts in Cardiology for the General Practitioner"**
HENRY L. SMITH, M.D., Detroit
Chief, Division Medicine Mt. Carmel Mercy Hospital, Detroit

J. DUANE MILLER

P.M.

12:15—LUNCHEON, Crystal Ballroom, Book-Cadillac Hotel
G. C. PENBERTHY, M.D., Detroit, *Chairman*

1:15 **"Treatment of Acute Anuria"**
ISADORE SNAPPER, M.D., New York City
Physician and Director Medical Education, the Mount Sinai Hospital

SIXTH ASSEMBLY

Grand Ballroom, Book-Cadillac Hotel

L. W. GARDNER, M.D., Detroit, *Chairman*

2:00 **"Differential Diagnosis in Diseases of the Upper Abdomen"**
WALTMAN WALTERS, M.D., Rochester, Minnesota
Professor of Surgery, Mayo Foundation, University of Minnesota; Member Board of Governors, Mayo Clinic; President-Elect Interstate Postgraduate Medical Assembly

2:20 **"Bronchiectasis"**
DANIEL W. MYERS, M.D., Detroit
Assistant Professor of Clinical Medicine, Wayne University College of Medicine; Attending Physician, Grace Hospital

REED M. NESBIT

2:40 **"Indications for Cesarean Section"**
F. BAYARD CARTER, M.D., Durham, N. C.
Chief of the Department of Obstetrics and Gynecology and Endocrinology, Duke University School of Medicine, Durham, N. C.

3:00 **FINAL INTERMISSION TO VIEW EXHIBITS**

3:30 **"Indications for and Results of Splenectomy"**
FREDERICK A. COLLER, M.D., Ann Arbor
Professor of Surgery and Chairman of the Department of Surgery, University of Michigan Medical School

4:00 **QUIZ PERIOD**
FREDERICK A. COLLER, M.D., Ann Arbor, Moderator
Participants:
F. BAYARD CARTER, M.D., Durham, N. C.
RICHARD H. FREYBERG, M.D., New York City
ROBERT B. KENNEDY, M.D., Detroit
J. DUANE MILLER, M.D., Grand Rapids
DANIEL W. MYERS, M.D., Detroit
REED M. NESBIT, M.D., Ann Arbor
JULIAN P. PRICE, M.D., Florence, S. C.
HENRY L. SMITH, M.D., Detroit
ISADORE SNAPPER, M.D., New York City
WALTMAN WALTERS, M.D., Rochester, Minnesota

END OF 1950 INSTITUTE

After the Institute, Plan on Attending the
MICHIGAN HEART DAY
Saturday, March 11, 1950
Book-Cadillac Hotel, Detroit
(Program follows)

HENRY L. SMITH

MICHIGAN HEART ASSOCIATION ANNUAL HEART DAY

Saturday, March 11, 1950

Crystal Ballroom
Book-Cadillac Hotel

PAUL S. BARKER, M.D., Ann Arbor, *Chairman*

A.M.

9:00 **Address of Welcome**
WARREN B. COOKSEY, M.D., Detroit
President, Michigan Heart Association

9:15 **"Criteria and Procedures for Diagnosis of Rheumatic Heart Disease"**
HUGH MCCULLOCH, M.D., Chicago, Illinois

HUGH MCCULLOCH

LOUIS V. KATZ

IRVINE H. PAGE

10:00 **"Arteriosclerosis"**
LOUIS V. KATZ, M.D., Chicago, Illinois

10:45 **"Hypertension"**
IRVINE H. PAGE, M.D., Cleveland, Ohio

Noon

12:00 **LUNCHEON**

"Research in Heart Disease, Past Accomplishments and Future Prospects"
PAUL S. BARKER, M.D., Ann Arbor
President-Elect: Michigan Heart Association

P.M.

1:30 **First Annual meeting of members of the Michigan Heart Association, with election of officers**

EXHIBITORS—1950 MICHIGAN POSTGRADUATE CLINICAL INSTITUTE

Company	Booth No.
A. S. Aloe Co.	33
Ames Company, Inc.	19
Baker Labs	12
Bilhuber-Knoll Corp	27
The Borden Co.	13
Camel Cigarettes	28, 29
Ciba Pharm. Products, Inc.	30
Cottrell-Clarke, Inc.	53
Davis & Geck, Inc.	8
Detroit X-Ray Sales Co.	4, 5
Doho Chemical Corp.	49
Farnsworth Labs.	14
C. B. Fleet Co., Inc.	11
Gerber Products Co.	22
Hack Shoe Co.	3
J. F. Hartz Co.	23
Holland-Rantos, Inc.	51
G. A. Ingram Co.	36
A. Kuhlman & Co.	1
Lea & Febiger	41
Lederle Labs	37
Liebel-Flarsheim Co.	16, 17
Eli Lilly & Co.	32
J. B. Lippincott Co.	6
M & R Dietetic Labs., Inc.	35
Maico Hearing Service	40
Mead Johnson & Co.	24, 25
Medical Aids Inc.	20
Medical Arts Surgical Supply Co.	38
Medical Protective Co.	47
Merck & Co., Inc.	39
C. V. Mosby Co.	15
Wm. R. Niedelson Co.	9
Ortho Pharmaceuticals	52
Parke, Davis & Co.	42, 43
Philip Morris & Co., Inc., Ltd.	10
Randolph Surgical Supply Co.	34
Sanborn Co.	31
Sandoz Chemical Works, Inc.	50
W. B. Saunders Co.	2
Schering Corp.	7
G. D. Searle & Co.	45
Sharp & Dohme, Inc.	21
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THE UNIVERSITY OF MICHIGAN MEDICAL SCHOOL POST-GRADUATE COURSES—1950—BRIEF REVIEW COURSES FOR GRADUATES IN MEDICINE

Anatomy (Thursdays)	February 16-June 1
Internal Medicine	
Diseases of the Gastro-Intestinal Tract	March 13-17
Diseases of the Heart	March 20-24
Rheumatic Disease	March 27-29
Recent Advances in Therapeutics	March 30-April 1
Endocrinology and Metabolism	April 3- 7
Diseases of the Blood and Blood-Forming Organs	April 10-14
Allergy	April 17-21
Electrocardiographic Diagnosis	August 28-September 2
Neurology	May 8-11
Ophthalmology	April 24-26
Pediatrics	April 12-14
Roentgenology, Diagnostic	April 17-21

For further information write to Howard H. Cummings, M.D., Chairman, Department of Postgraduate Medicine, Room 2040, University Hospital, Ann Arbor, Michigan.

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

CONFERENCE OF HEALTH OFFICERS

Health officers of Michigan's fifty-four local health departments which serve 93 per cent of the state's population will meet in Lansing, February 8-10, for a major three-day conference to consider future handling of public health programs carried on by local health departments with the co-operation and assistance of the Michigan Department of Health.

State Health Commissioner Albert E. Heustis has called the conference of the health officers, who work directly with the people on health programs, to get their suggestions for the continuation, revision or discontinuation of existing programs and for new programs which should be undertaken.

The Commissioner's Conference, the first of its type in the state, is expected to result in recommendations, not only for what the programs should include, but also how they should be developed.

For the purposes of the conference, health officers of the state have been divided into five committees, each of which is to study, conduct discussions and develop recommendations in specific fields.

Dr. Oscar Stryker, of Macomb County, is chairman of the committee which will consider services such as maternal and child health work, nutrition, geriatrics, accident prevention and school services including the hearing and vision programs. A committee on infectious diseases, including laboratory phases of their control, is headed by Dr. Joseph Molner, of Detroit.

Fiscal policies, fund distribution, formulas for distribution, and methods of securing better financing will be considered by a committee headed by Dr. L. D. Burkett, of Genesee county.

Inter-agency policies between state and local health departments, consultation service policies and qualifications of personnel will be the subject of a committee headed by Dr. Otto Engelke, of Washtenaw County.

Dr. Robert Hall, of Isabella County, is chairman of the committee to consider environmental health programs.

All professional personnel of the Michigan Department of Health will be available as resource people for the conference which will be held in the Department offices, Old DeWitt Road, Lansing.

DOCTOR KENDRICK ACCEPTS W H O ASSIGNMENT

Dr. Pearl Kendrick, Director of the Western Michigan Division of Laboratories, who gained world fame for development of whooping cough vaccine, has accepted temporary World Health Organization assignments in England and in South America.

Doctor Kendrick left in December to spend some time in England helping with the whooping cough study in that country. From England she went to South America where she will do work in connection with the extensive immunization program being planned by the United Nations International Children's Emergency Fund and the World Health Organization.

In South America, she is to work primarily on problems of immunization of children in Chile and Colombia, but she will also survey the public health laboratory facilities in the two countries. The assignments are expected to take two months, after which Doctor Kendrick will return to her duties in Grand Rapids.

CARBON MONOXIDE POISONING

People who ride in some of the newer makes of cars may be poisoned or overcome by carbon monoxide from the exhaust of the car preceding them. This is true in congested traffic or when a car with its motor running is parked ahead of their car. The air intake on air conditioned heaters in some new makes are in direct line with the exhaust of preceding cars.

PUBLIC HEALTH TRAINING

More than eighty University of Michigan graduate students in public health are getting actual health department experience in a training program carried on co-operatively by the University, the Michigan Department of Health and six local health departments which act as training centers.

The graduate students in the School of Public Health are divided into "campus health departments." Each campus department is assigned to a local health department—Barry, Branch-Hillsdale, Calhoun, Eaton or Macomb. The campus group spends one week in the local health department getting a working knowledge of the services of the department. Then the students return to the University where they continue to use statistics and problems of the local health department in their studies. Statistics are provided regularly by the local health department.

This is the third year such training has been provided. Cost-of-living stipends for the graduate students' one week in the local health departments are paid by the W. K. Kellogg Foundation.

NEW BIRTH AND DEATH CERTIFICATES

Beginning January 1, 1950, Michigan, in company with all other states and the signatory nations of the World Health Organizations, began using a new form of registering births, deaths and stillbirths. The new forms which went into simultaneous use are to be standard for the next fifteen years.

A new edition of the *Physicians' Handbook on Birth*

(Continued on Page 108)

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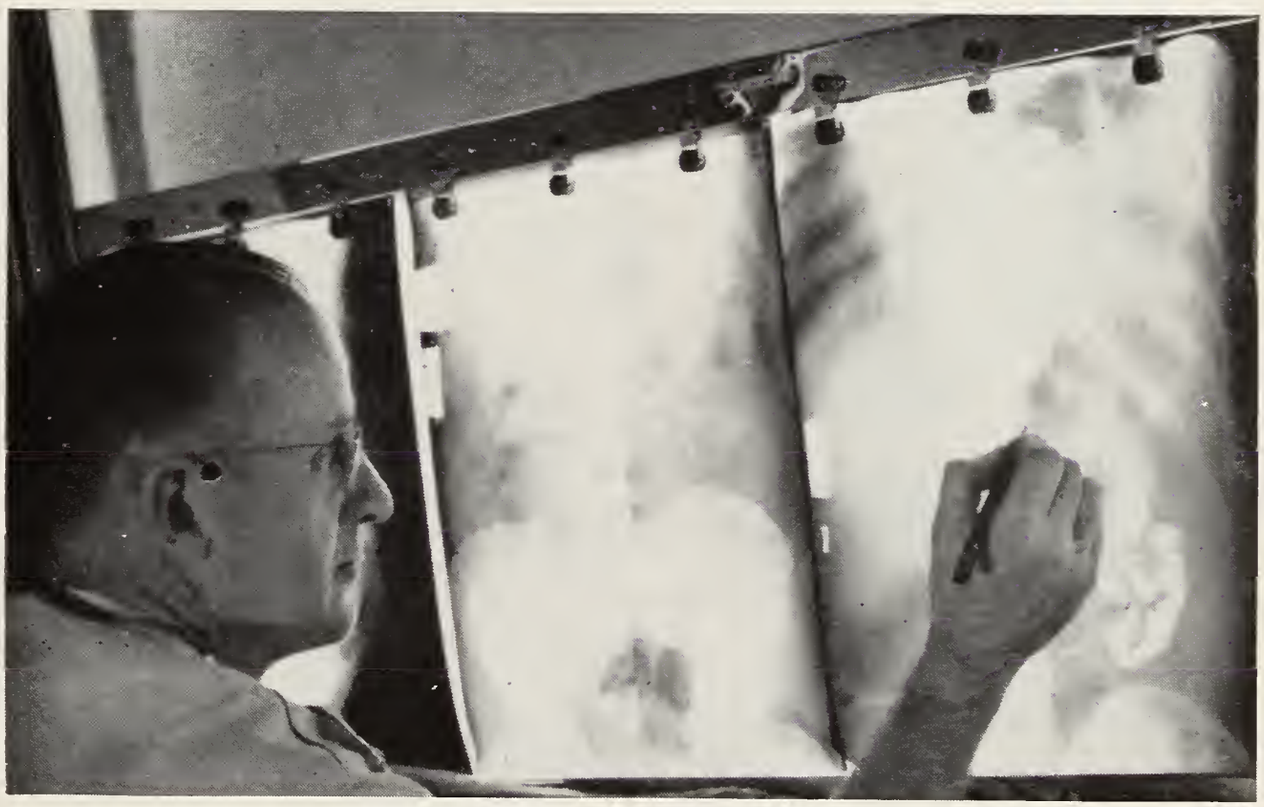

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NEW BIRTH AND DEATH CERTIFICATES

(Continued from Page 106)

and Death Registrations has been sent to all physicians, funeral directors and health officers. This handbook tells how the new system operates and includes samples of the new forms.

The changeover in Michigan has necessitated the printing of 1,750,000 new birth, death and stillbirth certificates, and the distribution of them to 1,776 local registrars. All old forms have been called in.

Questions regarding the new system or forms should be directed to the Section of Vital Statistics, Division of Disease Control, Records and Statistics, Michigan Department of Health.

NEWS LETTER FOR INSTITUTIONAL FOOD SERVICES

The Section of Nutrition is now preparing and distributing a monthly *News Letter for Institutional Food Services* to state institutions, tuberculosis sanatoria, small hospitals, convalescent homes, county infirmaries, and industrial food services. This newsletter gives buying tips, plentiful foods, low cost foods and how to use them, along with recipes and menus for large groups.

UNTASTY WATER DUE TO NEW PIPES

A petroleum or "chemical" taste in water supplies in new homes or in well-water supplies may be due to a cutting oil used in manufacturing the galvanized pipe or used by the plumber in fitting it. This taste does not make the water unsafe for drinking, but in order to remove the taste and odor, these pipes must be flushed out with hot water or steam or removed entirely.

FOREIGN VISITORS

Recent foreign visitors in the Michigan Department of Health were from Scotland, Tokyo, Ecuador, and the Philippines.

Ann Buchen, dietitian in charge of the 300-year-old, 1,500-bed Royal Infirmary, Edinburgh, Scotland, visited the Section of Nutrition.

Dr. Jevier B. Bustos of Quito, Ecuador, studied the water laboratories.

Dr. Kalsuiji Kato, vice-president of Tokyo Medical College, studied our methods of blood fractionation.

Dr. Demitrio Belmonte of Manila, P.I., visited several Divisions of the Department.

MICHIGAN CHILDREN DENTAL HEALTH DAY

Approximately 1,000 dentists, dental hygienists, public health workers, other medical personnel and lay people are expected to attend the Third Annual Michigan Children's Dental Health Day at Hotel Statler, Detroit, January 30.

National authorities in dental fields will talk on problems related to dental health of Michigan children. The Day is sponsored by the Detroit District Dental Society in co-operation with the Michigan Department of Health and other state agencies.

HOSPITAL GROUP ANNOUNCES SLIDING SCALE TO HELP POORER COMMUNITIES

The office of Hospital Survey and Construction has announced a new "sliding scale" plan of hospital financing, which will enable less wealthy Michigan communities which have need of hospitals to obtain a greater share of federal funds for hospital construction.

Hugh McGoldrick, Director of the Office, reports that the Michigan Advisory Hospital Council has recommended the sliding scale formula for the $2,500,000 in additional hospital funds recently made available to Michigan by federal legislation. Under this formula, the amount of federal money a community can get for a hospital project ranges from 40 to 60 per cent of total cost, depending upon the community's wealth and need as indicated in the equalized valuations (determined by the State Tax Commission) and the hospital need of the community (determined by the Michigan State Plan for the development of a co-ordinated hospital system).

Hospital projects already under construction will not be able to take advantage of the new rule because the new federal law does not carry a retroactive clause, McGoldrick said. Projects now under way will be limited to federal aid of not more than one-third of the total cost in conformity with the original law.

HILLMAN WATER SUPPLY NOW SAFE

The last unsafe water supply of an incorporated community in Michigan was eliminated when Hillman in Montmorency County recently put into service a safe supply.

The Division of Engineering, Michigan Department of Health, which for fifteen years has worked with the community to get a safe supply in operation, in 1945 ordered the community to place in service a safe supply. The order could not be fulfilled because drilling did not reveal a source sufficient to supply the village. After about twenty-five wells had been drilled, two wells with a capacity of 40 gallons a minute each, were developed. While this is a small supply, with the addition of meters and an elevated storage tank, it is adequate to meet the village needs.

PERSONAL ITEMS

Two staff members of the Michigan Department of Health have been named as special consultants to the Communicable Disease Center, Atlanta, Georgia. They are: Russell Y. Gottschall of the Division of Laboratories and Dr. John A. Cowan of the Division of Tuberculosis and Venereal Disease Control.

Other Michigan men among the seventy-three scientific authorities named as consultants are: Dr. C. Eugene Woodruff, Northville; Dr. Thomas Francis, Ann Arbor, and Dr. H. J. Stafseth, East Lansing.

* * *

Norman D. Henderson and William W. Ferguson of the Division of Laboratories, Michigan Department of Health, are co-authors of a paper on "Investigation of Bacteriophage Types D_1 and D_4 HP_{56} of Salmonella **Typhi** and Tehir Latent Bacteriophage Types" in the November issue of the *American Journal of Hygiene.*

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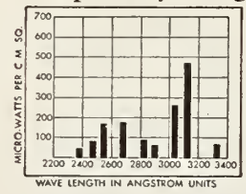

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In Memoriam

James Arthur Attridge, M.D., of Port Huron, was born September 10, 1870, at High Gate, Ontario, and was graduated from Wayne University College of Medicine in 1897. Doctor Attridge was a past president of the St. Clair County Medical Society, a life member of the Michigan State Medical Society, a member of the American Medical Association and a Fellow of the American College of Surgeons. He died in Port Huron on May 22, 1949, at the age of seventy-eight.

David E. Bagshaw, M.D., of Saginaw, was born October 10, 1876, at Sunderland, Ontario, and was graduated from the Saginaw Valley Medical College in 1902. He took postgraduate studies at Jefferson Medical College in Philadelphia and also attended the University of Toronto Medical School. Doctor Bagshaw was a past president of the Saginaw County Medical Society, a life member of the Michigan State Medical Society and a member of the American Medical Association. He expired in Los Angeles, California, on March 17, 1949, at the age of seventy-two years.

Corda Earl Beeman, M.D., of Grand Rapids, was born in Naples, New York, in 1874, and was graduated from the Cleveland-Pulte Medical College in 1903 He took postgraduate study in Austria, Switzerland, England, France and India. He was a member of the Kent County Medical Society, the Michigan State Medical Society and the American Medical Association, and was a Fellow of the American College of Surgeons. Doctor Beeman died on May 9, 1949, at the age of seventy-six years in Grand Rapids.

Frank Kelsey Belsley, M.D., of Benton Harbor, was born May 3, 1909, in Peoria, Illinois, and was graduated from Washington University School of Medicine, St. Louis, in 1935. He was a past president of the Berrien County Medical Society, a member of the Michigan State Medical Society and the American Medical Association. Doctor Belsley passed away on May 31, 1949, in Benton Harbor, Michigan, at the age of forty.

Herbert M. Best, M.D., of Lapeer, was born June 10, 1875, at Fingal, Ontario, and was graduated from Wayne University College of Medicine in 1901. Doctor Best served as secretary and president of the Lapeer County Medical Society, was a member of the Michigan State Medical Society, the American Medical Association and at the time of his death in Lapeer, April 28, 1949, was chairman of the MSMS County Secretaries and Public Relations Conference. He was seventy-three years of age.

Kenneth Edwin Blair, M.D., of Detroit, was born May 31, 1910, in San Diego, California, and was graduated from Northwestern University School of Medicine in 1938. He was a member of the Wayne County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor Blair was thirty-eight years of age at the time of his death in Detroit, on February 28, 1949.

Victor Joseph Blanchette, M.D., of Scottville, was born March 25, 1886, in St. George, Illinois, and was graduated from Chicago College of Medicine and Surgery in 1907. He was a member of the Mason County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor Blanchette died on May 4, 1949, in Scottville at the age of sixty-three years.

Arthur Francis Boell, M.D., of Grosse Pointe Park, was born in 1895, and was graduated from University of Michigan Medical School in 1921. He was a member of the Wayne County Medical Society, the Michigan State Medical Society, the American Medical Association and was a Fellow of the American College of Surgeons. Doctor Boell died June 21, 1949, at the age of fifty-three.

Jacob Hemans Burley, M.D., of Port Huron, was born August 9, 1877, at Park Hill, Ontario, and was graduated from Saginaw Valley Medical College in 1899. He also attended the Postgraduate Medical School and Hospital in Chicago, Illinois. He had been chairman of the St. Clair County Board of Health since 1943, was a member of the St. Clair County Medical Society and the American Medical Association. He was awarded emeritus membership in the Michigan State Medical Society posthumously at the September, 1949, meeting. Doctor Burley died on August 14, 1949, in Port Huron, at the age of seventy-one years.

Jacob Harold Chalat, M.D., of Detroit, was born in 1888, and was graduated from the University of Michigan Medical School in 1917. He was a member of the Wayne County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor Chalat died on May 12, 1949, in Detroit, at the age of sixty-one.

Howard Roy Coll, M.D., of Highland Park, was born in Essex, Ontario, in 1888, and was graduated from Wayne University College of Medicine in 1910. He was a member of the Wayne County Medical Society, the Michigan State Medical Society, the American Medical Association and the American Academy of General Practice. Doctor Coll died on October 30, 1949, in Highland Park at the age of sixty-one.

Martha Louise Pomeroy Sanderson Cottrell, M.D., of Novi, Michigan, was born in 1896 and was graduated from the College of Medical Evangelists, Los Angeles,

(Continued on Page 112))

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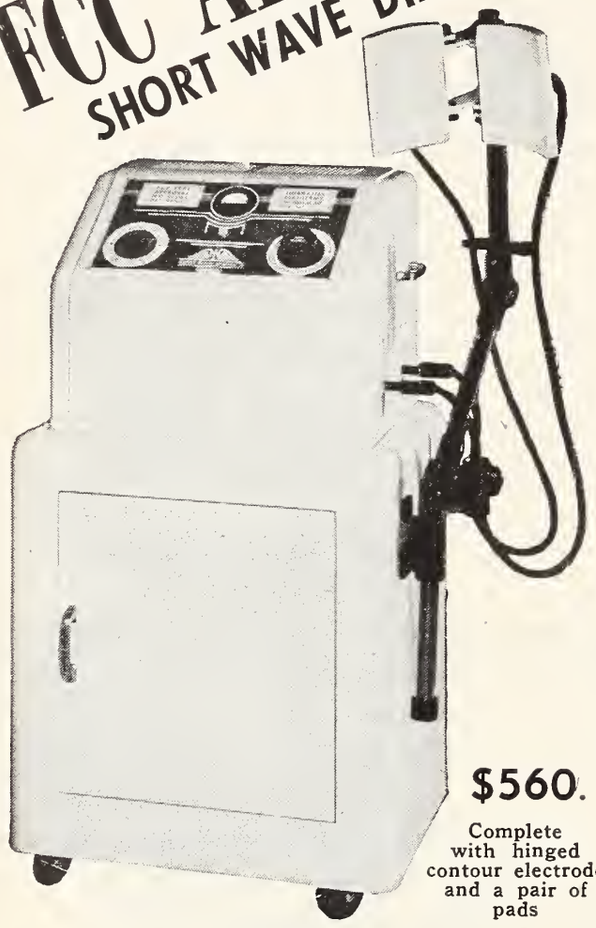

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(Continued from Page 110)

California, in 1922. She was a member of the Oakland County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor Cottrell died at the age of fifty-three, at Novi, on July 8, 1949.

Walter **Johnston** Cree, **M.D.**, of Detroit, was born in 1861 and was graduated from the Michigan College of Medicine in 1883. He had served as secretary of the Detroit Medical Library Association, the Wayne County Medical Society and the Detroit Obstetrical and Gynecological Society. He was at one time treasurer and historian of the Detroit Academy of Medicine. Dr. Cree was an emeritus member of the Michigan State Medical Society; he was a Fellow of the American Medical Association and of the Association of Military Surgeons. Doctor Cree died on November 9, 1949, in Birmingham, Michigan, at the age of eighty-eight years.

Thomas Edward DeGurse, M.D., of Marine City, was born in Corunna, Ontario, in 1873, and was graduated from Wayne University College of Medicine in 1895. Doctor DeGurse had practiced medicine in Marine City for fifty-four years and was the first recipient of Michigan's Foremost Family Physician award. He served as mayor of Marine City for nine terms. He was a member of the St. Clair County Medical Society, the American Medical Association and was awarded emeritus membership in the Michigan State Medical Society posthumously at its September, 1949, meeting. He had served as Councilor of the MSMS Seventh District for seven years. Doctor DeGurse was also a member of the Michigan Association of Industrial Physicians and Surgeons. He was seventy-five years of age at the time of his death on August 15, 1949.

Arthur Putnam Derby, M.D., of Detroit, was born in 1878, and was graduated from the University of Virginia Department of Medicine in 1904. He was consultant to the Tuberculosis Division of the United States Public Health Service, a member of the Wayne County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor Derby expired on June 5, 1949, in Detroit, at the age of seventy-one years.

Bruce Hutchinson Douglas, M.D., of Detroit, was born in Des Moines, Iowa, in 1892, and was graduated from Rush Medical College in 1921. His background was doubtlessly influenced by his uncle who was the famed Dr. Woods Hutchinson, a victim of tuberculosis and founder of Oregon's first health department and tuberculosis sanatorium. Following Bruce Douglas' internship, he joined the staff of Maybury Sanatorium where only two years later he was made medical director. He was appointed Detroit's Health Commissioner in 1941 and devoted his time unselfishly to assist in countless community services which sponsored study and as-

sistance for victims of tuberculosis, poliomyelitis, and cancer, as well as for those who suffered no disease but were victims of racial intolerance and bigotry. He was a member of the Wayne County Medical Society, Michigan State Medical Society, the American Medical Association and acted as delegate to the State Society for many years. Doctor Douglas was killed in an automobile accident near Millington on August 11, 1949, at the age of fifty-six years.

Clement Francis Derezinski, M.D., of Muskegon, was born on January 1, 1912, in Grand Rapids, and was graduated from Loyola University School of Medicine, Chicago, in 1937. He served with the U. S. Navy during World War II, was a member of the Muskegon County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor Derezinski died of poliomyelitis on August 19, 1949, in Muskegon. He was thirty-seven years of age.

Leslie Higley Stark DeWitt, M.D., of Kalamazoo, was born February 13, 1887, at Spring Lake, Michigan, and was graduated from the University of Michigan Medical School in 1910. He was a member of the Kalamazoo Academy of Medicine, the American Medical Association and a retired member of the Michigan State Medical Society. Doctor DeWitt had been ill since 1943. He died at the age of sixty-two on October 9, 1949.

Alexander Vaughan Forrester, M.D., of Detroit, was born in Victoria, British Columbia, in 1897, and was graduated from McGill University Faculty of Medicine, Montreal, in 1924. He was a member of the Wayne County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor Forrester was a long-time member of the MSMS House of Delegates. He died at the age of fifty-two on May 10, 1949.

Joseph David Goldsmith, M.D., of Detroit, was born in 1905, and was graduated from University of Michigan Medical School in 1932. Doctor Goldsmith was a member of the Wayne County Medical Society, the Michigan State Medical Society and the American Medical Association. He was forty-three years of age at the time of his death on March 19, 1949, in Detroit.

Burt Francis Green, M.D., of Hillsdale, was born December 16, 1869, at Paw Paw, Michigan, and was graduated from University of Michigan Medical School in 1900. He took postgraduate work at Harvard, the University of Michigan, and at the Mayo Clinic. He served as a Major in the Medical Corps during World War I, and had practiced medicine in Hillsdale since 1906. He was a member of the Hillsdale County Medical Society, of the Michigan State Medical Society and of the American Medical Association. He served as Councilor of the Second District of the State Medical Society for ten years. Doctor Green was a Fellow of the American College of Surgeons and a member of the

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Surgical Technique, Surgical Anatomy and Clinical Surgery, four weeks starting February 6, March 6.
Surgery of Colon and Rectum, one week, starting March 6.
Esophageal Surgery, one week, starting June 5.
Breast and Thyroid Surgery, one week, starting June 26.
Thoracic Surgery, one week, starting June 12.
Gallbladder Surgery, ten hours, starting April 24.
Fractures and Traumatic Surgery, two weeks, starting April 17.
GYNECOLOGY—Intensive Course, two weeks, starting February 20.
Vaginal Approach to Pelvic Surgery, one week, starting March 6.
OBSTETRICS—Intensive Course, two weeks, starting March 6.
PEDIATRICS—Intensive Course, two weeks, starting April 3.
Personal Course in Cerebral Palsy, two weeks, starting July 31.
MEDICINE—Intensive General Course, two weeks, starting April 24.
Hematology, one week, starting May 8.
Gastro-Enterology, two weeks, starting May 15.
Liver and Biliary Diseases, one week, starting June 5.
Gastroscopy, two weeks, starting March 6.
DERMATOLOGY—Formal Course, two weeks starting May 8. Informal Clinical Course every two weeks.
UROLOGY—Intensive Course, two weeks, starting April 17.
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Phi Delta Theta Fraternity and the Phi Rho Sigma Medical fraternity. He died on September 26, 1949, in Hillsdale, at the age of seventy-nine years.

Thomas K. Gruber, M.D., of Eloise, Michigan, was born July 4, 1887, in Navarre, Ohio, and was graduated from Western Reserve University Medical School in 1912. He served as a Major in the Medical Corps during World War I, was Treasurer of the Wayne County Medical Society, a member of the Michigan State Medical Society and a Delegate to the American Medical Association. Doctor Gruber had been Superintendent of the Wayne County General Hospital for twenty years and died in his quarters at the Hospital on August 7, 1949, at the age of sixty-two.

Joseph Anthony Haluska, M.D., of Detroit, was born in Great Falls, Montana, February 6, 1900, and was graduated from the Royal Hungarian Peter Pazmany University of Science in Budapest in 1923. He took postgraduate work at the Detroit College of Medicine and in Hungary. Doctor Haulska was a member of the Wayne County Medical Society, the Michigan State Medical Society and the American Medical Association. He died at the age of forty-nine in Detroit, on March 12, 1949.

ORIENTATION COURSE IN CLINICAL ALLERGY

Wayne University College of Medicine Auditorium

Wednesday, January 25, 1950

Chairman: JACK ROM, M.D.
Morning Session—9:00 A.M.

"Basic Concepts of Allergy"—SIDNEY FRIEDLAENDER, M.D.
"Allergic Diagnosis"—HOMER HOWES, M.D.
"Hay Fever and Allergic Rhinitis"—GEORGE WALDBOTT, M.D.
"Bronchial Asthma—Diagnosis"—JACK ROM, M.D.
"Bronchial Asthma—Treatment"—ALEX FRIEDLAENDER, M.D.

Lunch—12:00 M
Afternoon Session—1:30 P.M.

"Aspects of Pediatric Allergy"—SAMUEL J. LEVIN, M.D.
"Allergic Dermatoses—Contact"—LOREN SHAFFER, M.D.
"Allergic Dermatoses—Atopic, Urticaria, and Angioneurotic Edema"—ALEX FRIEDLAENDER, M.D.
"Food Allergy"—HOMER HOWES, M.D.
"Ocular Allergy"—A. D. RUEDEMANN, M.D.
Round Table on "Newer Drugs"—A. FRIEDLAENDER, M.D., S. FRIEDLAENDER, M.D., H. HOWES, M.D., and J. ROM, M.D.

This course, which is sponsored by Wayne University College of Medicine and the Allergy Clinic of Detroit Receiving Hospital is open to all interested physicians.

There will be no fee, but all interested in attending will please register by letter addressed to Dr. Jack Rom, Wayne University College of Medicine, Graduate School, Detroit 26.

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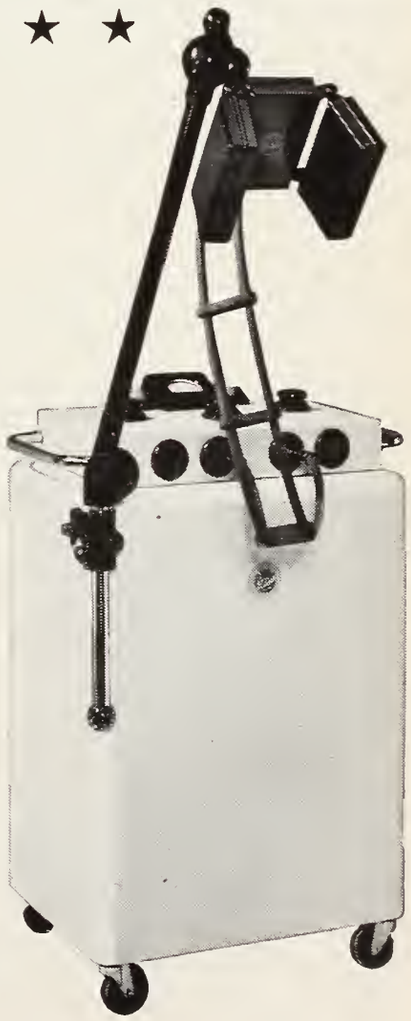

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Medical Michigan Authors

The December, 1949, issue of *Archives of Surgery,* contained an article by **James B. Thompson, M.D.; Kenneth F. MacLean, M.D., and Frederick A. Coller,** M.D., Ann Arbor, Michigan.

The December, 1949, issue of *Surgery, Gynecology, and Obstetrics* contained an article by **W. D. Barrett, M.D.; K. T. Miller, M.D., and C. R. Fessenmeyer, M.D.,** Detroit, Michigan.

The General Practitioner of Australia and New Zealand, in the September number, copied the paper "Early and Late Ectopic Pregnancy" by **Frank E. Whitacre, M.D.,** and **Harvey D. Lynn, M.D.,** which was published in THE JOURNAL MSMS, March, 1949.

The December, 1949, issue of *Bulletin of the New York Academy of Medicine* contained an article by **A. C. Furstenberg, M.D.,** Ann Arbor, on "A Chronicle of One Hundred Years of Otolaryngology."

* * *

In the November issue of *The Journal of the American College of Radiology,* **Sherwood Moore** of St. Louis, urges that industrial and hospital X-ray departments explore more fully the possibility of training blind persons for permanent jobs in darkrooms where X-ray films are processed. He has employed three blind men in his laboratory with success. The employing of blind persons in darkrooms depends upon the selection of suitable individuals and the processing of films in total darkness is desirable.

* * *

Michigan Medical Service, in the first ten months of 1949, expended for medical-surgical services $1,796,000.00 more than for the year of 1948. The Service has now paid out for services to patrons $37,784,427.04 and for Veterans $3,057,070.28, making a total for both plans of $41,321,397.32. As of November 30 with the final count not yet completed and audited, there were 1,502,000 persons protected by Michigan Medical Service certificates. During the year, Michigan Medical Service has acquired an office building in Detroit, the Burnham-Struble Building, now occupied by the Grand Trunk Railroad headquarters. Michigan Medical Service will be able to occupy this building at the termination of its present lease in the Washington Boulevard Building.

It costs six cents more per month to provide medical and surgical care for single men than for married men. It costs over two and one-half times as much for services to women than it does for services to men.

* * *

E. L. Henderson, M.D., Louisville, Kentucky, President-Elect of the American Medical Association, was signally honored at the recent meeting of the World Medical Association by being chosen President-Elect of that International group. Congratulations, Dr. Henderson, and sincere wishes for a full measure of success in your two important assignments!

* * *

William J. Burns, LL.B., Lansing, has been appointed for the third consecutive year, as a member of the Committee on Medical Jurisprudence of the State Bar of Michigan.

* * *

J. J. Lightbody, M.D., Detroit, President of the Wayne County Medical Society, has been appointed as Chairman of the Wayne County Hospitality Committee for the Fourth Michigan Postgraduate Clinical Institute, scheduled for the Book-Cadillac Hotel, Detroit on March 8-9-10, 1950.

* * *

George C. Stucky, M.D., Charlotte, was recently honored by being elected president of the Michigan Public Health Association at its 1949 Annual Session in Detroit.

Congratulations, Dr. Stucky!

* * *

J. O. Christianson, Ph.D., Superintendent of the School of Agriculture of the University of Minnesota, Saint Paul, Minnesota, has accepted the invitation of President W. E. Barstow, M.D., to be Biddle Lecturer on the occasion of the MSMS Annual Session in Detroit, on September 20, 1950. Dr. Christianson is famed for his informative and witty presentations. He is one of the best and most entertaining platform speakers in the country. His subject will be "Rediscovering America."

* * *

The Conference of Presidents and Other Officers of State Medical Association will hold its sixth Annual Meeting at the Palace Hotel in San Francisco on Sunday, June 25, 1950. For copy of Program write President Clarence E. Northcutt, M.D., 222½ E. Grand Ave., Ponca City, Oklahoma.

* * *

Members of State Board of Registration in Medicine: Cecil Corley, M.D., Jackson; D. C. Eisele, M.D., Ironwood; C. B. Gardner, M.D., Lansing; L. E. Holly, M.D., Muskegon; H. H. McNeil, M.D., Pontiac; Luther Peck, M.D., Plymouth; E. W. Schnoor, M.D., Grand Rapids; R. A. Sokolov, M.D., Highland Park; E. C. Swanson, M.D., Vassar; F. L. Troost, M.D., Holt; and J. E. McIntyre, M.D., Lansing, Secretary.

* * *

Dr. Morris Fishbein retired as Editor of "The Journal of the American Medical Association" on December 1, after almost thirty-seven years of outstanding service. As Editor of JAMA and the nine other scientific pub-

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1850—The 100th Anniversary of the Chicago Medical Society—1950

lications of that organization, Dr. Fishbein was recognized as pre-eminent. An editorial commemorating his contributions to health appeared in JAMA of December 10 (Page 1058).

Austin Smith, M.D., who has been associated with the headquarters office of the AMA since 1940, has been appointed Editor to succeed Dr. Fishbein. W. W. Bauer, M.D., Director of the AMA Bureau of Health Education, was appointed as Editor of Hygeia by the Board of Trustees of the American Medical Association.

* * *

The American Medical Association announces that the annual Conference on Rural Medical Service will be held in Kansas City, February 3-4, 1950. Panel study subjects will be five in number:

1. Rural medical facilities at the local level.
2. Relation of Agricultural Extension Service to rural health problems.
3. Community responsibilty for health service in rural areas.
4. Method of pre-payment for health services in rural areas.
5. The responsibility of the medical schools in the rural health program.

* * *

Are You Dieting?—"Everything that is desirable in life is illegal or immoral or fattening."—Saginaw County Medical Society Bulletin (R. D. Mudd, M.D., Editor)

G. C. Penberthy

AMA Study in England.—A group consisting of a general practitioner, a surgeon, an internist, a pediatrician, and an industrial physician, just left for England to make a factual study for the American Medical Association of the effect of the Health Act on the people of that country. The personnel of the Committee is:

Grover C. Penberthy, M.D., Professor of Clinical Surgery, Wayne University College of Medicine, Detroit.

Ulrich R. Bryner, M.D., Treasurer, American Academy of General Practice, Salt Lake City.

Walter B. Martin, M.D., member of the American Medical Association Board of Trustees, Norfolk, Virginia.

Heyworth N. Sanford, M.D., Clinical Professor of Pediatrics, University of Illinois College of Medicine, Chicago.

Carl M. Peterson, M.D., Secretary of the American Medical Association Council on Industrial Health, Chicago.

* * *

Labor leaders are beginning to realize that socialized medicine is a threat to the continued existence of unions, AMA President Ernest E. Irons said recently, in addressing the Southern Medical Association meeting in Cincinnati.

"Until recently labor leaders thought they saw in nationalized medicine a potent help in their labor programs," Dr. Irons said, adding: "Labor unions were told

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that support of administration measures was to their advantage and was imperative.

"Now, as the picture unfolds, it becomes evident that among the first victims of nationalized medicine would be the unions' own health service. Later, the unions themselves will be destroyed along with business firms in the progressive strangling of free enterprise by the enveloping socialist state.

"English labor unions already have felt the increasing restrictions of a Socialist government. In the propaganda for nationalized medicine in America, union members have been told that this could not happen. A considerable degree of finesse and some time will now be required here by understanding labor leaders to disabuse the minds of their followers of this socialist deception."

* * *

Homer H. Stryker, M.D., Kalamazoo, and **Alfred H. Whittaker, M.D.,** Detroit, were guest speakers on the program of the American Mutual Liability Insurance Company Seminar on Industrial Medicine and Surgery held in Indianapolis on November 30 and December 1, 1949. Dr. Stryker spoke on "Bursitis—Synovitis and Knee Joint Problems" and Dr. Whittaker's subject was "Fractures."

* * *

Domus Medica, International Center of Medical Welcoming Organizations, is occupying a new office at 111 East Oak Street, Chicago; the organization has corresponding offices in principal cities of the world. Physicians may write to the Domus Medica for information or for international contacts, as well as for scientific, cultural, artistic and tourist viewpoints. Physicians who plan to visit a foreign country may contact Valentin Charry, M.D., Delegate of Domus Medica, 111 East Oak Street, Chicago.

* * *

C. E. Umphrey, M.D., Detroit, President-Elect, presented a talk entitled "Medicine, Legislation, Federal Security and Labor" before the College Women's Club of Detroit, December 5, 1949. Mrs. Geo. Zinn was chairman of the meeting.

* * *

Advertised claims that the preparation "Neo-mineral" is effective against stomach ailments, rheumatism, bowel adhesions, and certain other conditions are challenged by Federal Trade Commission in a formal complaint against Neo-Mineral Company, Detroit, and its officers. The Commission also takes exception to representations that the product restores sexual powers, enriches the blood and improves the appetite. The respondents have twenty days to file answer.—Washington Report on Medical Sciences, December 5, 1949.

An estimated 17,000 persons in Michigan have active TB, but only half of these are known and receiving treatment. Finding the unknown is our common responsibility. The second is providing prompt isolation. In 1948, 87% of sanatorium admissions in Michigan were advanced cases—only 13% were minimal. Reversing this proportion will save countless lives and needless suffering.

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U. S. Public Health Service grants, recently made through the National Institute of Health, included $10,000 to Harper Hospital, Detroit, for a study of "Psychosomatic aspects of peptic ulcer"; $5,569 to Harper Hospital for a study on "The effect of various regimens on Man-Williamson ulcers"; and $4,644 to Wayne University, Detroit, for a study on "The functional architecture and mechanics of bones."

* * *

The National Heart Institute (of the National Institute of Health—Federal Security Agency) has given the following heart research grants to Michigan agencies: University of Michigan, $96,439; Michigan State College, $5,260; Wayne University, $24,000.

* * *

"Why the private practice of medicine furnishes this country with the finest medical care" is the subject of the fourth annual national essay contest for junior and senior high school students sponsored by the Association of American Physicians and Surgeons. Six national prizes are being awarded: the first, $1,000; the second, $500; the third, $100; the fourth, fifth and sixth, $25 each.

Wilson C. Wolfe, M.D., 360 N. Michigan Avenue, Chicago 1, is chairman of the AAPS essay contest committee.

* * *

The Mississippi Valley Medical Society announces its tenth annual essay contest for the best unpublished essay on any subject of general medical interest (including medical economics and education) and practical value to the general practitioner of medicine. A cash prize of $100, a gold medal, and a certificate of award is granted the winner—also an invitation to present his contribution before the 15th Annual Meeting of the Society in Springfield, Illinois, September 27-28-29, 1950. Entries are to be received no later than May 1, 1950, and are to be sent to Harold Swanberg, M.D., Secretary, 209 W.C.U. Bldg., Quincy, Illinois.

* * *

Are you getting carbon monoxide from the car ahead of you?—In some new model cars, the fresh air intake for the air-conditioned heater is located in the front fender or grille, directly in line with the exhaust pipe of the preceding car. This intake can and may draw in enough exhaust fumes to endanger occupants of the car. Some automobile manufacturers are taking steps to eliminate the danger.

If carbon monoxide is drawn into your car, your body will absorb it before it absorbs the oxygen in your car; the smaller the person, the more quickly he is affected —a child may become seriously ill of carbon monoxide poisoning before an adult feels it.

Don't get too close to the car ahead of you, and in traffic keep at least one window slightly open to insure a fresh air circulation in the car.

* * *

The Allegan County Medical Assistants Society was organized in October with Ruth DeLockery as president; Nettie Gauthier as vice president; Eleanor Hettinger as

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$15,000.00 accidental death *$75.00 weekly indemnity, accident and sickness*	**$24.00** *Quarterly*
$20,000.00 accidental death *$100.00 weekly indemnity, accident and sickness*	**$32.00** *Quarterly*

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secretary, and Helen Sikorskas as treasurer. The new Medical Assistants Society will meet the third Monday of every month in the Staff Room of Allegan Health Center.

* * *

Recent reprints received: Clifford D. Benson, M.D., Grover C. Penberthy, M.D., and Edward J. Hill, M.D., Detroit, on "Hernia into the Umbilical Cord and Omphalocele (Amniocele) in the Newborn"; Philip Thorek, M.D., Chicago, on "The Fallacy of the So-Called Thyroid Capsule."

* * *

C. E. Umphrey, M.D., Detroit, President-Elect of the Michigan State Medical Society, participated in the WJR radio broadcast "In Our Opinion" on November 27. The general subject of the radio presentation was "Why Socialism Did Not Work in England and Will Not Work Here."

* * *

"Public relations is primarily something you do," states John L. McCaffrey, President of the International Harvester Company, who believes that "only after you have done it, can you talk about it. The words can never be a substitute for the act."

* * *

"It's Different When It Happens to You" is the title of a presentation of Morton Hack of the Hack Shoe Company, Detroit, made before the Detroit Association of Insurance Agents. The following are some clever analogies:

"Look out: it's the doctor this time. Next time, there will be some who will prove to too many of the kind-hearted that the government should operate all shoe stores. Why not? Doesn't everyone need shoes? Weren't shoes the only article of clothing rationed? And isn't it true that many people don't have all the shoes they need? Surely you'll admit that many people can ill afford what shoes they do buy. Many people must wear inferior shoes because they can't afford the best.

"There are too many shoe stores anyway. It is wasteful competition. Under governmental control, we'll have fewer stores, and people will get their shoes free. It is true that they'll have to stand in line for permits, after they produce the necessary documents of necessity with supporting affidavits, notarized, of course, in triplicate. And for Hack Shoes, they'll need certificates in quintuplicate, from three doctors, including one orthopedic specialist, attesting to their degree of disability. Naturally, the rules and required forms will be changed periodically, without notice.

"The State Shoe Stores will be open at specified hours, 10-12; 2-5, no Saturdays or holidays. All those not fitted by 5 will be required to return on the next business day.

"There will be no fitting stools. You will try on your own shoes. There will only be one style. Different styles are wasteful of materials and stock space.

"There will be one shoe fitter to each 15,000 persons. Each State Store will have a manager and an assistant manager as well as two stock men, two porters, two cashiers and two record clerks. Also a stenographer for the manager and a clerk-typist for the assistant manager's office.

"Cities and counties will be subdivided into zones, each of which will have a Zone Supervisory Officer. The Zone Supervisor will have an assistant, two stenographers, three record clerks, three "shoppers" and a maintenance crew consisting of a carpenter, painter, plumber, electrician, heating engineer and their assistants. The Zone Supervisory office will collect and bulk all orders for

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replenishing of stock for forwarding to the next higher echelon. This will be repeated at all echelons with a subsequent time lag in transit of all orders of about six months.

"The City or County Director will have adequate staffs, including shoe store architects and a central warehousing executive.

"At the State level, we will have a Managing Director of Shoe Stores for the State. He will be responsible to the Federal Regional Co-ordinator for Shoe Stores who in turn will be under the Federal Director of Shoe Stores, in the Federal Security Agency.

"And everyone will have fallen arches from standing in line to get their shoes.

"Do you really want State Medicine?"

* * *

The Medical Assistants Society of Ingham County has as officers for the current year: Leah Rhoades, president; Roslyn Stadtler, vice president, Mildred Pappas, corresponding secretary; Sally Bennett, secretary, and Mary Lou Howe, treasurer. John E. Sander, M.D., Lansing, president of the Ingham County Medical Society, has appointed an advisory committee to the Ingham County Medical Assistants Society.

* * *

New members of the International College of Surgeons, United States Chapter, who were inducted at the Atlantic City Convocation on November 11, 1949, include the following surgeons from Michigan:

Certified Fellows: Leon Cherest Bosch, M.D., Grand Rapids; W. C. Behen, M.D., Lansing; Walter S. Novak, M.D., Port Huron; Marion Beal Noyes, M.D., Detroit; Constantine L. Oden, M.D., Muskegon.

Advanced to the Rank of Certified Fellows: Alexander W. Blain, M.D., Detroit; Ben F. Glowacki, M.D., Detroit; Clyde Simpson Martin, M.D., Port Huron; Ray S. Morrish, Flint; Jacob F. Wenzel, M.D., Detroit; Thomas Wilensky, M.D., Lansing; and Alfred Heacock Wittaker, M.D., Detroit.

Associates: Leonard C. Blakey, M.D., Monroe; Fred O. Lepley, M.D., Detroit; Frederick Elwin Ludwig, M.D., Port Huron; Russell Earl Lynch, M.D., Centerline; and Alfred A. Thompson, M.D., Mt. Clemens.

* * *

Edward J. Kendricks, M.D., of Alpena, Michigan, has been promoted to the rank of Brigadier General in the U. S. Air Force. He is now Director of Staffing and Education of the newly created Air Force Medical Service. Dr. Kendricks was graduated in 1932 from the Army Medical School and the Army Medical Field Service School; he entered the School of Aviation Medicine in 1934, and joined the Ninth Air Force in Cairo, as surgeon, in 1942. In 1946, General Kendricks became Chief of the Aero Medical Laboratory at Dayton, Ohio. He has been awarded the Legion of Merit with Cluster, the Soldier's Medal, and the Bronze Star.

Congratulations, General Kendricks, of Alpena, Michigan!

* * *

$10,500 to Rheumatic Fever Control Program.—The health of the children of Michigan received a substantial assist from the Arthritis and Rheumatism Foundation and the Michigan Society for Crippled Chil-

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dren and Adults, Inc. when these two organizations made grants totaling $10,500 to the Rheumatic Fever Control Program of the Michigan State Medical Society. Announcement of the gifts was made by L. Fernald Foster, M.D., Bay City, Secretary of the Society.

The largest grant, $6,000 from the Michigan Society for Crippled Children and Adults, Inc., was announced by Emmet Richards, prominent Alpena Publisher, and Percy C. Angove, Detroit, President and Executive Secretary, respectively, of the Society. Henry T. Ewald, Chairman of the Executive Committee of the Michigan Chapter of the Arthritis and Rheumatism Foundation, presented the check of $4,500 for his organization.

Dr. Foster, in announcing the gifts, said:

"The life-giving program of rheumatic fever detection centers currently operating in thirty Michigan cities can now be enlarged through the generosity of these grants. In a few short years Michigan has progressed in this program to the point where other states and cities are looking to this Commonwealth for leadership. With the added funds we can go further toward the end of making available to all the people of Michigan the latest findings in the diagnosis of rheumatic fever and arthritis."

* * *

Rheumatic Fever Control Center Chairman, as appointed for the year 1949-50 by the county medical society in which the Center is located (up to December 5, 1949), are as follows:

Center	*Chairman*	*Address*
Alpena	Harold Kessler, M.D.	Alpena General Hospital, Alpena
Bay City	L. Fernald Foster, M.D.	Mercy Hospital, Bay City
Detroit	Norman E. Clarke, M.D.	Wayne Co. Medical Society, 4421 Woodward Ave., Detroit
Grand Rapids	Jerome Webber, M.D.	129 E. Fulton St., Grand Rapids
Jackson	Frank Van Schoick, M.D.	W. A. Foote Memorial Hospital, Jackson
Kalamazoo	H. S. Heersma, M.D.	Bronson Methodist Hospital, Kalamazoo
Muskegon	DeVere R. Boyd, M.D.	1735 Peck St., Muskegon
Pontiac	Donald S. Smith, M.D.	St. Joseph's Mercy Hospital, 900 Woodward Ave., Pontiac
Saginaw	David P. Gage, M.D.	27 Jarvis Yawkey Ct., 217 So. Jefferson, Saginaw

* * *

First Speakers Day Program, held at the Holy Cross Hospital, Detroit, on November 30, 1949, was well attended. The speakers were: Ernest D. Gardner, M.D., Associate Professor Anatomy—Wayne University College of Medicine. Topic: "General Principles of Pain Mechanism," and E. S. Gurdjian, M.D., Professor of Neuro-Surgery—Wayne University College of Medicine. Topic: "Clinical Pain Control." Following the meeting at Holy Cross Hospital, a luncheon with round-table discussion was held at the Whittier Hotel.

* * *

"Parergon," published by Mead Johnson and Co. of Evansville, Indiana, contains in its 1949 edition reproductions of the graphic arts produced by thirty-three Michigan doctors of medicine. The following have been honored by having an example of their artistic avocation published in "Parergon," a word from the Greek meaning "work by the side of work."

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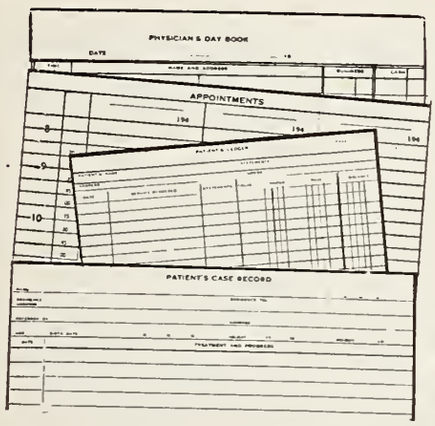

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W. C. Behen, M.D., Lansing—oil—"Life In Mexico"; Bernard J. Beuker, M.D., East Jordan—oil—"The Janitor's Portrait"; G. Clare Bishop, M.D., Almont—photograph—"Sponge Diver"; Morris Braverman, M.D., Detroit—leather tooling—"Picture Frame"; Philip N. Brown, M.D., Ypsilanti—pastel—"Signorina Superba."

W. Alan Chickering, M.D., Fort Custer—wood carving—"Dorothy"; G. H. Cook, M.D., Ionia—pastel—"Back".

D. C. Durman, M.D., Saginaw—oil—"Lincoln."

Avard Fairbanks, M.D., Ann Arbor—plaster—"Relief, Children of Dr. Furstenburg"; W. W. Fosget, M.D., Lansing—water color—"Pal"; W. M. Foster, M.D., Detroit—photograph—"Glacier Trail".

W. E. B. Hall, M.D., Port Huron—plaster old impression—"Leaf Spray"; Ruth Herrick, M.D., Grand Rapids—photograph—"Rural School"; T. V. Hoagland, M.D., Ypsilanti—water color—"Suspended Animation"; R. K. Hollingsworth, M.D., Ann Arbor—ceramics—"Table Console—3 piece set".

W. B. Johnson, M.D., Detroit—pastel—"West Vidette".

Norman L. Lindquist, M.D., Manistique—photograph—"Iron Ore"; M. B. Llewellyn, M.D., Detroit—needle work—"Coat of Arms".

Hazen L. Miller, M.D., Detroit—oil—"O. P. D."; Sallie W. Miller, M.D., Port Huron—oil—"Eucalyptus—California".

Anderson Nettleship, M.D., Detroit—oil—"Peace, Men Returning From Work".

Charles W. O'Dell, M.D., Ann Arbor—pastel—"Collie"; Constantine Oden, M.D., Muskegon—photograph—"Mary Lind".

Russell Palmer, M.D., St. James—oil—"Winter Landscape"; Hermann Pinkus, M.D., Monroe—color photograph—"At the Old Water Wheel".

Harold F. Raynor, M.D., Detroit—metal art—"Tray"; Francis F. Rosenbaum, M.D., Ann Arbor—photograph—"At Spring Mill".

Arthuur L. Stanley, M.D., Lansing—wood carving—"Human Skeleton"; Bert E. Stofer, M.D., Detroit—photograph—"Snooty".

Julius C. Tapert, M.D., Grosse Pointe—wood carving—"My Wife"; G. W. Trumble, M.D., Mt. Morris—oil—"Returning Spring".

H. F. Warden, M.D., Dearborn—oil—"Marine"; W. H. Winchester, M.D., Flint—photograph—"Portrait in Sanguine".

* * *

Dr. Henry F. Vaughan, Dean of School of Public Health at the University of Michigan, received the Sedgwick Memorial Medal for distinguished service in public health, at the recent APHA meeting in New York.

Congratulations, Dr. Vaughan!

ANNUAL COUNTY SECRETARIES AND PUBLIC RELATIONS CONFERENCE

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January 22, 1950

THEME—AMERICANISM

Morning Session—10:00 A.M.

"England's Dilemma"—
JOHN B. BENNETT, Congressman, 12th District

"What Do You Know—For Sure?"
(Examination on Socialized Medicine)

Film on "Medical Impractices"
(Also "To Your Health," if time allows)

NOON DAY DINNER (The Italian Garden)—12:00 M

Presentation of Michigan Health Council Award to A. S. Brunk, M.D., Detroit.

"Foreign Aid—Success or Failure"
ROY W. GIFFORD, Borg-Warner International Corporation, Detroit

Afternoon Session—2:00 P.M.

"Americanism vs. Socialism"
(Speech on Congressional situation)
GERALD R. FORD, JR., Congressman, 5th District

Report on Examination
(Question and Answer Period)
Leader: L. F. FOSTER, M.D.,
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Acknowledgment of all books received will be made in this column, and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.

FOR THE NEW MOTHER. By Mildred V. Hardcastle, R.N. Illustrated by Shirley Tattersfield. Philadelphia and Toronto: The John C. Winston Company. 1949. Price $2.00.

The young mother will find this book takes her from the very first experiences with the baby, bath, formula, schedule, and then the increased responsibilities and services throughout the first year of the baby's life. The advice is well selected and agreeably presented. This book, in the hands of the young mother, should relieve her mind, be a great help, and make many calls for the doctor unnecessary.

ALLERGY IN RELATION TO OTOLARYNGOLOGY. By French K. Hansel, M.D., M.S., F.A.C.A., Editor-in-Chief, Annals of Allergy; Director of the Hansel Foundation; Associate Professor of Otolaryngology, Washington University School of Medicine. Panel Discussion. Saint Paul and Minneapolis: Bruce Publishing Company, 1949. Price $2.50.

The author presents thirty pages of discussion and very clear exposition of the subject, Allergy in Relation to Otolaryngology. Then follows a panel discussion by nine outstanding teachers and clinicians. Irving B. Goldman, M.D., of New York, believes that infections and obstructive symptoms in tonsils are a positive indication for surgery, even in the allergic child. Kenneth L. Craft, M.D., of Indianapolis, discusses sinuses and nasal polyps. Granville F. Knight, M.D., Santa Barbara, and M. Martyn Kafka, M.D., New York, talk about aviation medicine. Walter E. Owens, M.D., Peoria, Illinois, tells of bronchoscopy and diagnosis of carcinoma of the lung. Hugh A. Kuhn, M.D., Hammond, Indiana, takes the relation of allergy to the ear. Jerome Glaser, M.D., Rochester, N. Y., talks about the treatment of lymphoid hyperplasia. John H. Mitchel, Columbus, Ohio, and Harold A. Abramson, M.D., New York, are also included. This is a very valuable discussion of important and bothersome aspects of the subject.

THE DIAGNOSIS OF PANCREATIC DISEASE. By Louis Bauman, M.D., formerly Assistant Professor of Clinical Medicine, Columbia University, and Assistant Visiting Physician to the Presbyterian Hospital, New York. With a foreward by Allen O. Whipple, M.D. Philadelphia: J. B. Lippincott Co., 1949. Price $5.00.

This monograph discusses the various tests of pancreatic function and their clinical application in the diagnosis of pancreatic disease. Using mecholyl as the stimulant, the pancreatic secretion, free from admixture with gastric juices is collected by means of a conjoined tube, the larger end placed in the duodenum and the shorter end placed in the stomach. Samples of pancreatic secretion are taken at ten minute intervals for one hour, and the fractions, if neutral or alkaline, are tested for volume, amylase, protease and lipase concentrations. This is a time-consuming procedure. However, the author believes it will probably be shortened and become a routine procedure in the hospital chemical laboratory.

The results of approximately 550 pancreatic function

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tests have been correlated with findings at operation and/or autopsy. In spite of disturbing limitations, these tests yield information of definite clinical values. Marked diminution of ferment concentration usually indicates widespread disturbance. In acute pancreatitis the serum amylase and lipase values are of greater importance than any other laboratory test. These may however, be elevated in duodenal ulcer penetrating into the pancreas. In twenty-two cases of verified carcinoma of the head of the pancreas, the pancreatic juice was abnormal in twenty (90 per cent) of the cases. In carcinoma of the body of the pancreas, there is usually enough uninvolved tissue to provide a normal secretion.

This is a timely book because, as clinicians, we need any addition to our too few diagnostic aids in the diagnosis of pancreatic disease. As Dr. Whipple states in his foreword, this is a much needed monograph which should stimulate further studies in pancreatic diseases.

L.E.V.

EXTRA-ABDOMINAL CAUSES PRODUCING ACUTE ABDOMINAL SIGNS

(Continued from Page 63)

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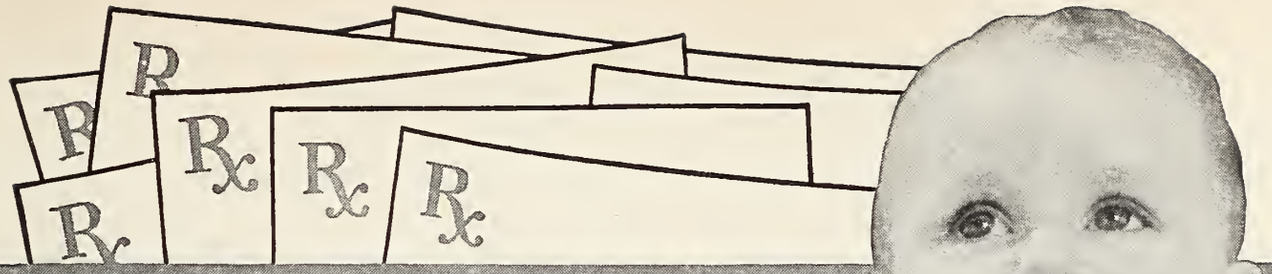

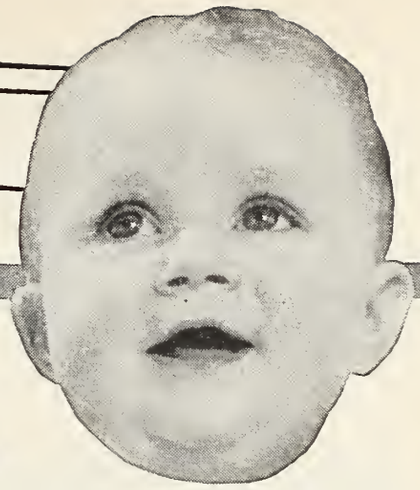

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Progress with Change

That the Michigan State Medical Society is a progressive organization is a well-known fact. Long ago, the pioneering activity of Michigan's medical men was epitomized in the phrase "Another FIRST for Michigan." Officials of other state societies credit the advance of Michigan Medicine to the leadership which has been the good fortune of MSMS for many years.

A study of the "top command" should bring out some illuminating information and perhaps give reason for the Society's progress.

First, one is struck by the great change among the leaders of the Michigan State Medical Society —on the policy-making Council and among the officers—in a short space of years.

For example, not one Councilor on the 1935 Board still serves in that capacity.

Of the sixteen Councilors who served the profession in the years 1936, 1937, and 1938, but one now remains in that capacity. Only two carry on from the year 1939!

Sixty-five New Faces

From 1935 through 1949, sixty-five changes among members of The Council and MSMS officers have occurred, including addition of the two new Councilors from Wayne County made by the 1948 House of Delegates. Incidentally, all the powers and duties of the House of Delegates—the MSMS legislative body—are placed in The Council between annual sessions of the House.

SMILING MEMBERS OF MSMS COUNCIL

In the Michigan State Medical Society Hospitality Booth at the Grand Rapids Annual Session, the following members of The Council were photographed in a pleasant mood:

Seated (left to right) Councilor J. D. Miller, M.D., Grand Rapids, Past-President P. L. Ledwidge, M.D., Detroit, Treasurer A. S. Brunk, M.D., Detroit, Immediate Past-President E. F. Sladek, M.D., Traverse City, Chairman of The Council O. O. Beck, M.D., Birmingham, President W. E. Barstow, M.D., St. Louis, and Councilor A. H. Miller, M.D., Gladstone.

Standing (left to right) Councilors J. S. DeTar, M.D., Milan, E. A. Osius, M.D., Detroit, E. A. Oakes, M.D., Manistee, Wilfrid Haughey, M.D., Battle Creek, L. W. Hull, M.D., Detroit, F. H. Drummond, M.D., Kawkawlin, C. A. Paukstis, M.D., Ludington, W. S. Jones, M.D., Menominee, W. B. Harm, M.D., Detroit, and William Bromme, M.D., Detroit.

Busy elsewhere with MSMS Annual Session activities when photo was taken: Speaker R. H. Baker, M.D., Pontiac, Secretary L. Fernald Foster, M.D., Bay City, Councilor L. C. Harvie, M.D., Saginaw, Vice-Chairman of The Council R. J. Hubbell, M.D., Kalamazoo, Councilor R. C. Pochert, M.D., Owosso, Councilor P. A. Riley, M.D., Jackson, President-elect C. E. Umphrey, M.D., Detroit, and Councilor H. B. Zemmer, M.D., Lapeer.

One may conclude from this fact that the legendary progress and outstanding trail-blazing activities of the Michigan State Medical Society are attributable to constant change in the personnel of its policy-making Board.

It appears that the steady advancement of MSMS has been made with the never-tiring help of new minds and new hands. New leaders—young blood—keen thinking—therein seems to lie the secret behind the pioneering spirit that has lifted Michigan's medical profession to a permanent position of leadership in things medical.

So long as a medical organization measures its progress by the contributions of new, virile leaders, that organization will prosper—and with its prospering will come the advancements and accomplishments that make for better and healthier citizens.

The common occurrence of mixed infections in burns and chronic wounds suggests the use of an antibacterial agent with a wide antibacterial spectrum. Furacin, effective against the majority of wound bacteria in vivo, is receiving favorable and steadily increasing mention in the literature for such conditions.* Furacin® brand of nitrofurazone, is available as Furacin Soluble Dressing (N.N.R.) and as Furacin Solution (N.N.R.) containing 0.2 per cent Furacin. These preparations are indicated for topical application *in the prophylaxis or treatment of infections of* wounds, second and third degree burns, cutaneous ulcers, pyodermas and skin grafts. *Literature on request.*

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*Bigler, J.: Chicago M. Soc. Bull. 50:269, 1947 • Coakley, W. A. et al.: Plast. & Reconstruct. Surg. 3:667 (Nov.) 1948 • Curtis, L.: Surg. Clin. N. A. 1466 (Dec.) 1947 • Downing, J. et al.: J. A. M. A. 133:299, 1947 • Johnson, H.: Arch. Dermat. & Syph. 57:348, 1948 • Mays, J.: J. M. A. Georgia 36:263, 1947 • McCollough, N.: Indust. Med. 16:128, 1947 • Mills, J. et al.: Plast. & Reconstruct. Surg. 3:245, 1948 • Ryan, T.: U. S. Nav. M. Bull. 47:991, 1947 • Shipley, E. et al.: Surg., Gynec. & Obst. 84:366, 1947 • Snyder, M. et al.: Mil. Surgeon 97:380, 1945.

For mixed infections

PR In Practice

RADIO AS A PUBLIC RELATIONS MEDIUM

The furthering of relations between the medical profession and the public can be carried out in many ways. In previous issues of THE JOURNAL, we have considered the utilization of displays, exhibits and pamphlets. Today, we shall discuss the values of radio, a miracle of the twentieth century, yet a medium so far developed in a short space of time that it is now possible to reach more than 97 per cent of the homes in Michigan.

Scene taken at United Broadcasting Studios in Chicago during production of the 1,000th episode of the MSMS "Tell Me, Doctor" radio series.

Having this effective instrument to draw upon, the Michigan State Medical Society has consistently made it a point to utilize the established radio facilities to the fullest extent as a force for building a better and ever-increasing understanding of the medical doctor's role in today's complex social and economic pattern.

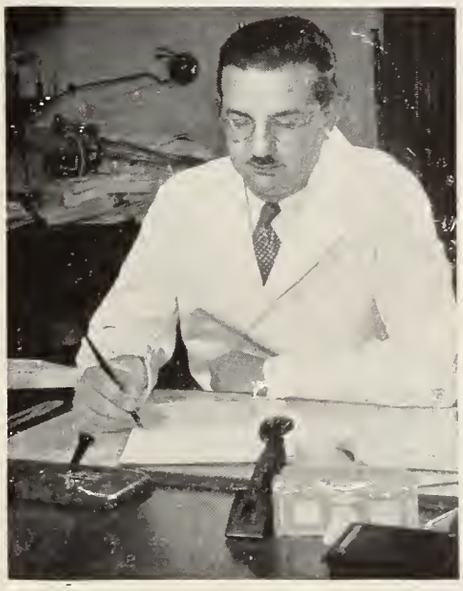
When dealing with radio it should always be borne in mind that radio stations operate under Federal license in the public interest and are required to devote a considerable portion of their broadcasting time to public service programs. By offering their aid and services in health education broadcasting, the medical profession is enabling the radio stations to discharge effectively this obligation to its listeners.

It should also be kept in mind that the radio stations in Michigan have always been more than co-operative in extending every assistance in the furthering of the MSMS public relations program and have shown a genuine and appreciative interest in the material which has been supplied them.

In this article, emphasis will be on that part of the medical broadcasting program which has emanated from the state level. However, each doctor in Michigan should always recognize the opportunities which ever exist for supplementing any statewide program with locally or society-sponsored programs over local radio stations. While many individual county medical societies have used and are using programs of local origin, it should be pointed out that local radio outlets are eager to co-operate still further with the many doctors in their particular broadcast area. The opportunity for local public service broadcasts are legion—but the impetus for such activity must

come from local doctors meeting and discussing the possibilities with local radio station owners and managers.

The value of locally developed radio broadcasts was summed up recently by L. W. Hull, M.D., Public Relations Committee chairman, when he said, "The more numerous your individual contacts with the local stations and the greater your intimacy with those in charge of programming the richer will be our returns in the effective employment of radio's voice aimed towards an enlightened public on matters of health."



"Tell Me, Doctor" scripts are carefully checked for their medical accuracy by C. Allen Payne, M.D., Grand Rapids, chairman of the Radio sub-committee of the Public Relations Committee. Following this, they are sent to the Public Relations office for checking regarding policy matters.

Commenting further, Dr. Hull said:

"It is also important to remember that radio stations can never be utilized for propaganda. They have a public trust to carry out which precludes the furthering of particular interests or organizations. However, to present the cause against socialized medicine it isn't necessary to damn contemplated proposals for health and welfare; instead, the progress and progressive program of medicine can be constantly presented as positive and objective arguments against projected changes."

The present broadcasting activity of the MSMS is broken into three categories: the "Tell Me, Doctor" series, the "Medical Talks" programs originating from the University of Michigan, and the sustaining programs of many county medical societies throughout the state. More recently, the thinking of the State Society leaders has been directed toward the use of communication's newest offspring, television.

The "Tell Me, Doctor" series is approaching its one thousandth broadcast as this article is being written. A further breakdown of this activity indicates that more than 3,600 records have been produced which in turn means that more than 21,600 separate programs of the series have been heard since the popular five-minute healthcast took to the airlanes in 1946.

C. E. Umphrey, M.D., President-Elect of the Michigan State Medical Society, during a recent broadcast as part of the Wayne County Medical Society's public relations program.

The approach of the one thousandth broadcast also heralds a new approach in the treatment of material for the programs. In the interests of increased listener value and versatility, the transcriptions now feature two voices instead of the lone commentator who carried the show along to its present enviable position among medical radio broadcasts. "Tell Me, Doctor," is currently aired over twenty-four Michigan stations as well as stations in Virginia, West Virginia and Oklahoma.

The "Medical Talks" programs are another series of long-standing popularity which continue through joint co-operation of the University of Michigan Broadcasting Service and the MSMS through its Scientific Radio Committee headed by John M. Sheldon, M.D. The series began in 1925 and has been one of the most popular broadcasts by the University.

The series, which originates in the modern studios of WUOM at the University of Michigan in Ann Arbor, presents discussion programs with speakers coming from the faculties of the Univer-

(Continued on Page 210)

ACS President Frederick A. Coller, M.D.

One of Michigan's outstanding surgeons was honored last October by being elevated to the presidency of the American College of Surgeons. Frederick Amasa Coller, M.D., of Ann Arbor will receive additional honors when his Michigan colleagues honor him at a luncheon on Friday, March 10, 1950. The noon-day meeting will be a feature of the closing day of the annual Michigan Postgraduate Clinical Institute being held at the Book-Cadillac Hotel, Detroit, March 8-9-10.

Frederick A. Coller, M.D.

In addition to receiving a testimonial scroll at the March 10 luncheon, Dr. Coller will take a prominent part in the last day's activities by presenting a scientific lecture at 3:30 p.m. as well as presiding at the 4:00 p.m. Quiz Period which closes the 1950 Institute.

Dr. Coller, Professor and Chairman of the Department of Surgery at the University of Michigan Medical School, has compiled an enviable record since his graduation from Harvard University Medical School in 1912. During World War I he served as a Lieutenant Colonel in the Medical Corps in the European Theater.

Scientific affiliations besides the top position in the American College of Surgeons include the American Board of Surgery, International Surgical Association, Society of Clinical Surgery, Central Surgical Association, Past-president American Surgical Association, Southern Surgical Association, Western Surgical Association, Michigan State Medical Society, Washtenaw County Medical Society, American Medical Association and the Detroit Academy of Surgery.

A testimonial banquet in honor of the President of the American College of Surgeons will be held in the Detroit Athletic Club, Friday evening, March 10, at 7:00 p.m. Michigan members of the College, former residents of Dr. Coller and many of his friends in both the medical profession and the business world will gather to pay honor to this Michigan practitioner and eminent teacher of surgery who has brought distinction not only to himself but to the medical profession of Michigan. The Committee on Arrangements for the Coller Banquet is composed of Grover C. Penberthy, M.D., Detroit, Chairman; W. D. Barrett, M.D., and Edward Dowdle, M.D., of Detroit, Wm. A. Hyland, M.D., Grand Rapids, C. S. Kennedy and R. D. McClure, M.D., of Detroit, Henry K. Ransom, M.D., of Ann Arbor, R. L. Mustard, M.D., Battle Creek, E. L. Thirlby, M.D., Traverse City, and J. M. Wellman, M.D., Lansing.

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(1) Lyon, R. A.: Am. J. Obst. & Gynec. *47*: 532, 1944. (2) Groper, M. J., and Biskind, G. R.: J. Clin. Endocrinol. *2*:703, 1942. (3) Wiesbader, H., and Filler, W.: Am. J. Obst. & Gynec. *51*:75, 1946.

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Cancer Comment

LEADERSHIP IN PROFESSIONAL CANCER EDUCATION

The recent mailing has completed distribution of the *Michigan Cancer Bulletin* to members of the Michigan State Medical Society. During the past three years, the equivalent of a 400-page textbook carrying the latest information about the diagnosis of cancer, as well as much collateral data, has been placed in the hands of all Michigan physicians. Returns from the postcard inquiry accompanying the last mailing have been overwhelmingly favorable as to the value of this type of professional education and a desire to see it continued. This response has given the subcommittee on Professional Education of the Cancer Control Committee an incentive to work out some similar or equivalent plan for a continuing program. Intensive study is now being given to this problem.

In addition to a publication sent regularly to all members, two means for furthering professional cancer education are readily available to all Michigan physicians. One is the extension of the Hillsdale type Plan for Tumor Detection to all local areas, whereby every physician takes every opportunity to examine his patients for possible early hidden cancer when examining them for any other reason in his office during regular office hours. This offers an excellent opportunity to extend and improve his diagnostic ability in the cancer field. Physicians who have been participating in such programs report that their interest in cancer has been materially increased, their general diagnostic ability has been sharpened and their service to their patients has been definitely enhanced. This is an excellent illustration of a self-education program in the general medical field.

The Hillsdale Plan continues to enlist the interest of a rapidly increasing number of state and local medical societies. Several Michigan county medical societies have adopted it in recent months, and more are giving it serious consideration. The Minnesota State Medical Association is the latest of state medical organizations to adopt the plan and to recommend it to their local societies as an answer to the public demand for improved diagnostic service in the cancer field.

Another opportunity for continuing cancer education available to many physicians is found in the tumor diagnostic and treatment clinics organized in accordance with standards of the American College of Surgeons and found in several of the larger hospitals of the state. At these clinics, patients are diagnosed and their treatment recommended by a special committee of the hospital staff where the clinic is held. Treatment is then carried out in accordance with the recommendations of the tumor clinic staff and the judgment of the referring physician. Physicians are urged to accompany their patients to these clinics to take advantage of the educational possibilities, and visiting physicians are always welcome.

About fifteen such clinics were established in Michigan several years ago but due to the late war and other reasons their number has not been extended since. It would seem possible and even desirable that additional special organizations of this kind be developed within the staff organizations of many more hospitals in areas not now served by them both for service to the cancer patient and as educational centers for the profession. In some states, notably in Illinois, a major professional education program is built around the operation of these tumor clinics which are being so organized that no patient or physician will be more than fifty miles distant from any one of them.

With the up-to-date information supplied to all members of the Michigan State Medical Society through the *Michigan Cancer Bulletin* during the past three years; with the rapid extension of the Hillsdale Plan; with the increasing number of cancer programs at medical meetings and cancer articles appearing in the medical journals of all specialties; and with the increased willingness of the public to submit to medical examination in the absence of evident illness, physicians of Michigan have every reason to keep abreast of the rapid progress being made in knowledge of the cancer problem and means for its control. When these incentives are added to the fact that the eyes of the medical profession throughout the United States are focused on what is being accomplished in the attack on cancer in Michigan, the responsibility of the physicians of Michigan to maintain this leadership becomes of paramount importance.

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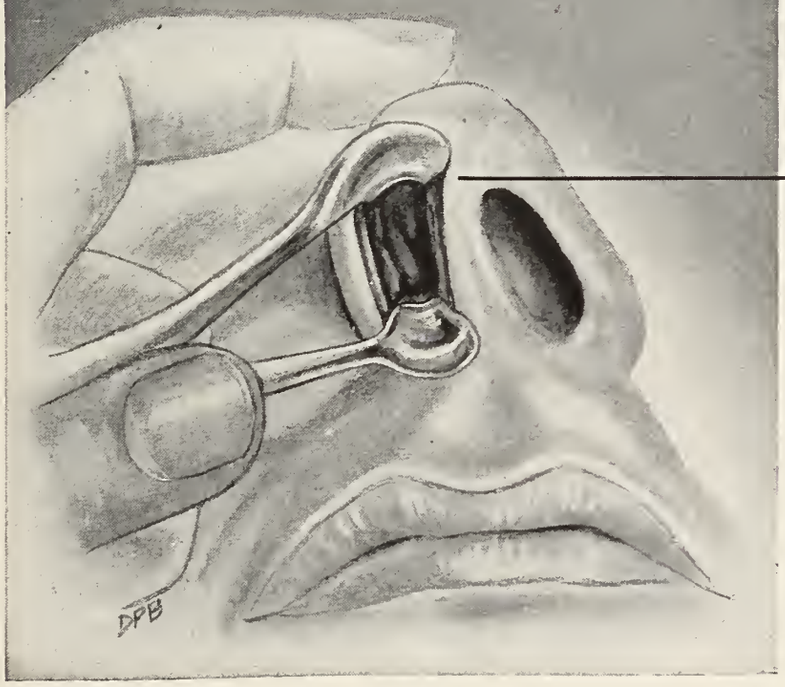
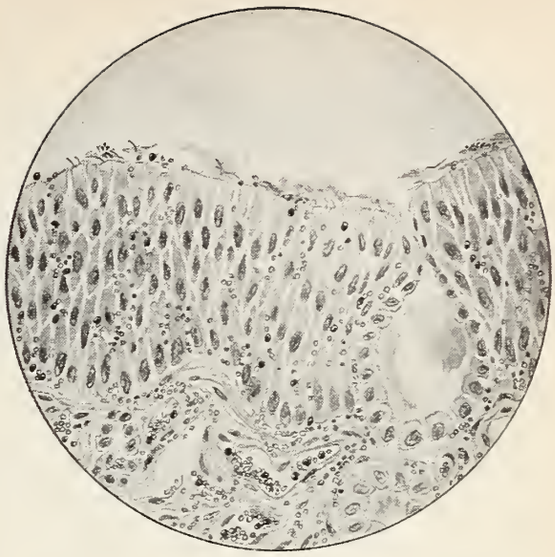
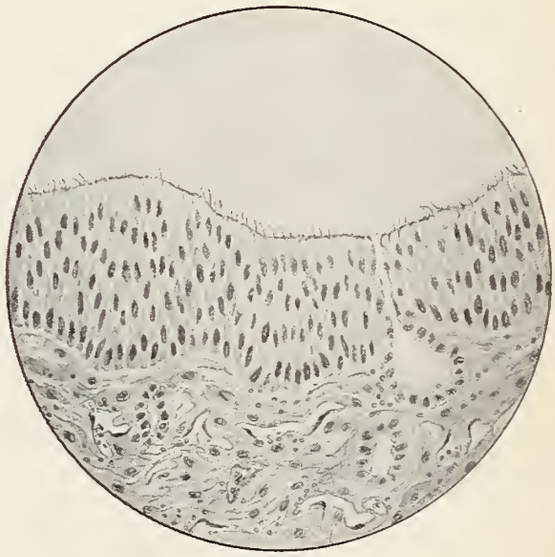
in colds
. . . sinusitis





Nasal membrane showing increased leukocytes with denudation of cilia.

Normal appearing nasal epithelium.



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Seven Medical Relief Categories in Michigan

1. Afflicted Child

Who Makes Payment: Michigan Crippled Children Commission. Act provides medical care and treatment requiring hospitalization of afflicted children. State funds used for Afflicted Child Act.

Who Certifies: The attending physician has the right to select the hospital for the afflicted child (provided the hospital is on the Michigan Crippled Children Commission list of approved hospitals) and the probate judge makes certification for treatment. It is necessary that the physician make certification to the Judge of Probate on MCCC Form No. 121.

How to Bill: Billing must be submitted to the Michigan Crippled Children Commission, Hollister Building, Lansing, Michigan, on MCCC Form A-20.

Special Forms: MCCC Form No. 121 for certification. MCCC Form No. A-20 for billing.

What Constitutes Eligibility: An Afflicted Child is any child under twenty-one years of age, married or unmarried, who is afflicted with a physical defect or illness which can be remedied and whose parents or guardians have resided in the state for one year and are financially unable, in whole or in part, to provide the necessary treatment.

Deadline on Billing: The statutes state that billing for services, either medical or hospital, must be refused if rendered *later than sixty days after* the discharge of the patient.

2. Crippled Child

Who Makes Payment: Michigan Crippled Children Commission. Act provides medical care and treatment requiring hospitalization of crippled children. State and Federal funds are used for the Crippled Child Act.

Who Certifies: The Probate Judge has the right to select the hospital for the crippled child (provided the hospital is on the Michigan Crippled Children Commission list of approved hospitals) and the judge makes his certification based on the certification of medical need by the referring physician. It is necessary that the physician make certification to the Judge of Probate on MCCC Form No. 121.

How to Bill: Billing must be submitted to the Michigan Crippled Children Commission, Hollister Building, Lansing, Michigan, on MCCC Form A-20.

Special Forms: MCCC Form No. 121 for certification. MCCC Form No. A-20 for billing.

What Constitutes Eligibility: A Crippled Child is any child under twenty-one years of age, married or unmarried, whose activity is or may become restricted by defect or deformity of bones or muscles or the impairment of function thereof, whose condition can be remedied and whose parents or guardians are financially unable to provide the necessary treatment in whole or in part.

Deadline on Billing: The statutes state that billing for services, either medical or hospital, must be refused if rendered *later than sixty days after* the discharge of the patient.

3. Afflicted Adult

Who Pays: The County Board of Social Welfare is responsible for the medical and hospital treatment of the afflicted adult. County funds used exclusively.

Who Certifies: In most counties the County Board of Social Welfare certifies the patient for medical aid and hospitalization based on the referring physician's statement. This varies in the counties of the state since some have filter committees. In cases of emergency the hospital should send entrance report to County Board of Social Welfare so an investigation of need can be made.

How to Bill: Billing should be made to the County Board of Social Welfare.

Special Forms: None—any itemized statement is acceptable. Some Counties have Medical Directors who certify for payment to the County Medical Society.

What Constitutes Eligibility: A financial investigation by the Social Welfare Board on the need basis established by each county.

Deadline on Billing: There is no state-wide program or set policy. Bills should be submitted as soon as possible after release of the patient from the hospital to insure prompt payment. Home and office treatment in Ingham County billed no later than the 15th of the month following treatment.

NOTE: Some counties issue a medical card for

(Continued on Page 146)

Good Nutrition..

A VITAL FACTOR IN THERAPY

The sound and wholesome nutritious diet is an integral part of modern day preventive and definitive therapy. A steady stream of adequate amounts of all the essential nutritional elements is vital for good growth, maintenance of tissue structure and functioning, healing after trauma, and resistance to infection. For maintaining this daily, steady stream of nutrients, however, conditions both in health and illness often make imperative the use of an efficient food supplement along with the diet.

The *multiple dietary food supplement* Ovaltine in milk has wide usefulness for enhancing to full adequacy even nutritionally poor diets. Its rich store of vitamins and minerals includes vitamins A and D, ascorbic acid, thiamine, riboflavin and niacin, and calcium, iron and phosphorus. Its nutritionally complete protein has excellent biologic rating.

Since these vital nutritional values along with carbohydrate and easily emulsifiable milk fat are incorporated in liquid suspension or solution, Ovaltine in milk is also especially adapted to liquid diets. The highly satisfying flavor makes for its ready acceptability when foods are often distasteful.

The important overall nutrient contribution of three glassfuls of Ovaltine mixed with milk is presented in the accompanying table.

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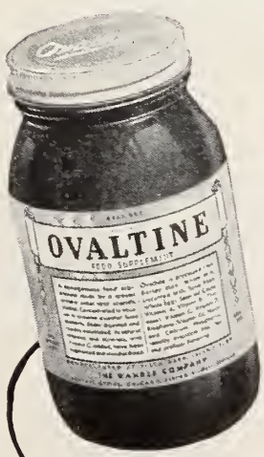

Ovaltine

Three servings of Ovaltine, each made of ½ oz. of Ovaltine and 8 oz. of whole milk,* provide:

CALORIES	676	VITAMIN A	3000 I.U.
PROTEIN	32 Gm.	VITAMIN B_1	1.16 mg.
FAT	32 Gm.	RIBOFLAVIN	2.0 mg.
CARBOHYDRATE	65 Gm.	NIACIN	6.8 mg.
CALCIUM	1.12 Gm.	VITAMIN C	30.0 mg.
PHOSPHORUS	0.94 Gm.	VITAMIN D	417 I.U.
IRON	12 mg.	COPPER	0.5 mg.

*Based an average reparted values for milk.

Two kinds, Plain and Chocolate Flavored. Serving for serving, they are virtually identical in nutritional content.

(Continued from Page 144)

the use of the patient in home and office calls—renewed monthly by the case worker. This varies in the Counties.

4. Direct Relief

Who Pays: County and State funds are involved in this program administered by the County Board of Social Welfare.

Who Certifies: County Board of Social Welfare makes investigation and certifies the patient for medical aid (home and office) based on the referring physician's statement.

How to Bill: Bills should be submitted to the County Board of Social Welfare.

Special Forms: Any itemized statement is satisfactory. Some counties do have special forms.

What Constitutes Eligibility: The County Board of Social Welfare makes investigation of the financial condition of the recipient and certifies if eligible for Direct Relief.

Deadline on Billing: Billing should be submitted as quickly as possible to insure prompt payment. Some counties may have a deadline date.

5. Old Age Assistance

Who Pays: Federal and State Funds are involved and are administered by the County Bureau of Social Aid.

Who Certifies: The County issues a grant to the individual with a limitation of $60.00 for home and office care and $80.00 per month if hospital or convalescent care is involved. This grant must cover cost of living and medical treatment.

How to Bill: The bill should be rendered to the patient since the doctor-patient relationship is maintained in this case.

Special Forms: Any customary statement to the patient is satisfactory.

What Constitutes Eligibility: Recipient must be sixty-five years of age or more, investigation of need is made by the County Bureau of Social Aid, and treatment will be of three months' duration or more.

Deadline on Billing: None—Bills should be rendered as soon as possible after release from the hospital or completion of treatment to insure prompt payment.

6. Aid to the Blind

Who Pays: Federal and State Funds are involved in the Aid to the Blind program administered by the County Bureau of Social Aid.

Who Certifies: This program of aid to the blind is administered by grants to the patient for cost of living with the limitation of $60.00 per month if home and office treatment is involved and $80.00 per month for hospital or convalescent care. The medical treatment must be paid from this allotment of funds by the patient. A statement of medical need should be submitted to the County Bureau of Social Aid in advance of treatment on Form SB-54 if the treatment is to be of three months' duration or more.

How to Bill: Bill should be rendered directly to the patient, since under this system of grants the doctor-patient relationship exists.

Special Forms: Any itemized statement. County Bureaus of Social Aid have various methods.

What Constitutes Eligibility: The patient is without sufficient income to handle his medical requirements. An investigation of need is made by the County Bureau of Social Aid to ascertain eligibility.

Deadline on Billing: None—The bill should be submitted as quickly as possible following completion of treatment or release from the hospital to insure prompt payment.

7. Aid to Dependent Children

Who Pays: Federal and State funds are involved in this program administered by the County Bureau of Social Aid.

Who Certifies: Funds are issued directly to the parent or other relative caring for the child by the Bureau of Social Aid. The patient makes his own arrangements for medical care with the doctor and hospital. A limitation of $80.00 per month for cost of living is granted for one child plus $12.00 per month for each additional child, out of which the medical costs must be paid.

How to Bill: The doctor or hospital should render bill directly to the patient.

Special Forms: None—The usual form of billing is satisfactory.

What Constitutes Eligibility: Investigation of need is made by the County Bureau of Social Aid. The age limit is sixteen or, if in school, eighteen years. The parent must be incapacitated or missing from the home in order for the child to receive aid under this program.

Deadline on Billing: None—Bills should be rendered as soon as possible after release of the patient from the hospital and completion of treatment in order to insure prompt payment.

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Try *Dulcet* Penicillin Tablets—appealing, candy-like cubes that pack the therapeutic potency of 50,000 units of penicillin G potassium (buffered with 0.25 Gm. calcium carbonate). Stable indefinitely, cinnamon-flavored *Dulcet* Tablets possess the same antibiotic action as an equal unitage of penicillin in unflavored tablets. Although designed for easing the administration of oral penicillin to children, *Dulcet* Tablets are preferred by many adults who simply wish to avoid unpleasant tasting medicine. *Dulcet* Penicillin Potassium Buffered Tablets are available at pharmacies everywhere—in bottles of 12. For literature, write to

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MPCI—MARCH 8-9-10

The fourth Michigan Postgraduate Clinical Institute will be held in the Book-Cadillac Hotel, Detroit, on Wednesday, Thursday, Friday, March 8-9-10. P. L. Ledwidge, M.D., of Detroit, General Chairman of Arrangements, invites all MSMS members to "one of the finest medical conferences we have ever presented." Attendance and interest in the MPCI increases yearly along with the calibre of the program and the nationally known speakers appearing on the platform. The 1950 Institute offers doctors of medicine a concentrated three-day continuation course studded with medical luminaries from all parts of the country. Program printed in January issue, page 101.

A feature of the Institute program will be an informative talk by Grover C. Penberthy, M.D., Detroit, on "England's Enigma—the Sad Story of Socialism." Dr. Penberthy was chosen by the American Medical Association as one of five eminent doctors of medicine to visit England in January-February for a six weeks' inspection of England's socialization program.

HEART DAY—MARCH 11

Annual Heart Day will be featured on Saturday, March 11, under the sponsorship of the Michigan Heart Association. The morning lectures will be held in the Crystal Ballroom of the Book-Cadillac Hotel, followed by the annual Heart Day luncheon and the first annual meeting of members of the Michigan Heart Association with election of officers. All MSMS members are urged to attend and learn of the latest advancements in the possible cause and present and future applications in preventing arteriosclerosis, hypertension and rheumatic fever. Program published in January JOURNAL, page 105.

MICHIGAN INDUSTRIAL HEALTH DAY—MARCH 29

"Michigan Industrial Health Day" represents something new on the medical postgraduate horizon. This interesting and instructive continuation course in Industrial Medicine will be held in the Auditorium of the School of Public Health, Ann Arbor, on Wednesday, March 29, 1950, from 9:00 a.m. to 5:00 p.m. The evening program includes a testimonial banquet to the president of the American Association of Industrial Physicians and Surgeons, Alfred H. Whittaker, M.D., of Detroit.

Sponsors of Michigan Industrial Health Day are the Michigan Association of Industrial Physicians and Surgeons, the Medical School of the University of Michigan, Wayne University College of Medicine, School of Public Health, University of Michigan, Michigan State Medical Society's Committee on Industrial Health, and the Division of Industrial Health of the State Health Department.

See program on page 226.

MICHIGAN MATERNAL MORTALITY STUDY

The Maternal Health Committee of the Michigan State Medical Society announces that a study of the maternal deaths that occur in the state was inaugurated on January 1, 1950. The plan is to have every maternal death that will occur in 1950 carefully studied.

The state will be divided into districts, and a medical investigator, a diplomate of the American Board of Obstetrics and Gynecology, or a man eligible for the Board examinations, will be selected to obtain this information in each district.

It is hoped that the investigation can be made within a week or ten days after the maternal death occurs, so that all pertinent details will be fresh in the minds of the attending physician, the family, and the hospital personnel.

The physician who renders maternal care will be requested to notify the Michigan Department of Health immediately by telephone (charges reversed), and to give the name, the address, the place of death, and cause of death. The hospitals will be furnished with blanks and will be requested to notify the Michigan Department of Health immediately after the death occurs.

The success of this study will depend upon the prompt and efficient co-operation of the investigator, the attending physician, and hospital personnel.

The study will be under the auspices of the Michigan State Medical Society and the Michigan Department of Health.

TAX DEDUCTIONS FOR ENTERTAINMENT

As tax-paying time approaches many doctors will wonder about allowable deductions in figuring their taxable income, particularly about their right to deduct entertainment and club expenses.

Costs of entertainment of medical colleagues and patients are deductible IF they can be sustained by proof consisting of satisfactory evidence. This means evidence satisfactory to the Bureau of Internal Revenue (THE BURDEN OF PROOF IS ON THE TAXPAYER). Many returns for previous years have been challenged.

In one case involving an attorney, the court held that amounts expended for entertainment, initiation fees and dues were not deductible, because proof offered by the taxpayer did not show

(Continued on Page 150)

AUREOMYCIN HYDROCHLORIDE LEDERLE

in resistant staphylococcal infections

AUREO-MYCIN

Aureomycin has been shown to be highly useful in the control of staphylococcal infections, many of which exhibit a high degree of resistance to other antibiotics and chemotherapeutic agents. The prognosis in systemic staphylococcal infections is sufficiently serious so that the optimum treatment should be administered immediately, and continued for one or several days after the temperature has subsided to normal.

Aureomycin has been found effective for the control of the following infections: bacteroides septicemia, brucellosis, Gram-negative infections — including those caused by the coli-aerogenes group, Gram-positive infections — including those caused by streptococci and pneumococci, granuloma inguinale, lymphogranuloma venereum, *Hemophilus influenzae* infections, primary atypical pneumonia, psittacosis, Q fever, rickettsialpox, Rocky Mountain spotted fever, penicillin-resistant subacute bacterial endocarditis, sinusitis caused by susceptible organisms, tularemia, typhus, bacterial and viral-like infections of the eye.

Capsules: Bottles of 25, 50 mg. each capsule. Bottles of 16, 250 mg. each capsule.
Ophthalmic: Vials of 25 mg. with dropper; solution prepared by adding 5 cc. of distilled water.

LEDERLE LABORATORIES DIVISION AMERICAN CYANAMID COMPANY 30 Rockefeller Plaza, New York 20, N. Y.

TAX DEDUCTIONS FOR ENTERTAINMENT

(Continued from Page 148)

that "the purpose of the expenditure was primarily business rather than social or personal, and that the business in which the taxpayer was engaged benefited thereby."

In another case the Tax Court disallowed club dues at two different clubs as an expense, but did allow one half the total house bills at both clubs because it found that the taxpayer actually used the clubs at least 50 per cent of the time for entertaining clients and other purposes "incident to the practice of his profession." IT IS IMPORTANT TO REMEMBER THAT EACH CASE IS DECIDED ON ITS PARTICULAR FACTS AND MERIT. There is no categorical rule about what specific expenses may be deducted. The Internal Revenue Code provides, in Section 23 (a) (1) (A), that "All ordinary and necessary expenses incurred in carrying on any trade or business may be deducted from gross income from a business or profession."

Most physicians who have had claimed deductions disallowed failed to sustain them because they were unable to present adequate records to support the expenses. It is a good rule to keep all cancelled checks and club statements. A record should be made either in the taxpayer's books or on the statements, showing who, where, when, and how much. Where adequate records are not kept the collector will estimate the portion properly allowable as a business expense. A decision of the United States Circuit Court of Appeals in 1930 states that "Absolute certainty in such matters is usually impossible and is not necessary; the Board should make as close an approximation as it can, bearing heavily if it chooses, upon the taxpayer, whose inexactitude is of his own making."

On the basis of cases decided by the Tax Court, one final and important test must be met. The physician must be able to convince the collector that the expense was made in reasonable anticipation of some professional benefit. Thus, he must present PROOF as to the original purpose in taking out a club membership and the extent to which the membership is used for business purposes.

REMEMBER: The burden of proof is on *you* so keep adequate records.—Digest by Mac F. Cahal, J.D., in *General Practice News,* American Academy of General Practice, January, 1950.

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of December 21, 1949

- Monthly financial reports, including detailed breakdown of the Public Education Account and of the Public Education Reserve Account, were presented, studied, discussed and approved. Bills payable for the current month were presented and approved.
- The Secretary was instructed to inform all MSMS members re the AMA dues for 1950 and that "the Michigan State Medical Society approves the AMA dues structure for 1950 and urges every member to continue to support the AMA, as in the past, both as to dues and personal service, remembering that each Doctor of Medicine *is* the American Medical Association."
- Committee reports were presented from the Mental Hygiene Committee, the Industrial Health Committee (including approval of Michigan Industrial Health Day in Ann Arbor on March 29, 1950), the Michigan Health Council, Maternal Health Committee (including approval of the Maternal Mortality Study to begin January 1, 1950), Scientific Radio Committee, Commission on Healing Arts, Rheumatic Fever Control Committee (including monthly progress report of Medical Co-ordinator Leon DeVel, M.D.), Special Committee on Mental and Social Problems, Advisory Committee to National Foundation for Infantile Paralysis, Legislative Committee (including endorsement of Wayne University's efforts to secure funds for a new science building), and special Committee on Medical Meetings (a subcommittee of the Public Relations Committee).
- President W. E. Barstow, M.D., reported that he had appointed Harry F. Becker, M.D., of Battle Creek as MSMS representative to the Committee on National Disaster Relief, at the invitation of the Governor.
- President-elect C. E. Umphrey, M.D., recommended co-operation with the July, 1951, celebration of the Founding of Detroit by Cadillac, which suggestion was approved and referred to the Public Relations Department for follow-up.
- The program of the Annual County Secretaries-Public Relations Conference of January 22, 1950, was approved.
- General Counsel J. Joseph Herbert reported on the successful Conference of Legal Counsels of State Medical Societies held in Washington, D. C., on December 6.
- The Editor's recommendation that the March, 1950, Number of JMSMS be dedicated to "Cancer Control" and the September Number to "Arthritis and Rheumatism" was approved.
- The Public Relations Counsel's recommendation that press conferences be held in the various Councillor Districts, with the first experimental meeting scheduled for Bay City, was approved; the first documentary movie of MSMS, now in production, will be titled "The Glass House"; 30 requests for the MSMS motion picture "To Your Health" have been received; the recommendation that Health Information Centers be developed in various areas of the State, using the offices of Blue Cross-Blue Shield and the organizational work of the Michigan Health Council, was approved, with the instruction that this be implemented as quickly as possible.

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Military Medicine

ARMY ACTS TO MEET SUMMER MEDICAL SHORTAGE

An anticipated critical shortage of physicians this summer in overseas commands was revealed when Major General R. W. Bliss, Army Surgeon General, announced emergency plans for alleviating the condition.

The commanders of Army General Hospitals, General Bliss stated, are being notified that 100 medical officers are to be selected from first and second year residents in teaching hospitals to meet the temporary medical needs in the European and Far Eastern Commands during the summer months. He emphasized that the officers selected would serve only temporarily in their overseas assignments and would return to their regular residency assignments during August. Extension of their resident periods will cover time lost from formal training, he said.

The Army Surgeon General explained this temporary shortage is caused by the loss during the summer months of the last large group of doctors who are completing their service obligation to the Government in return for wartime exemption and financial aid to finish their medical education. General Bliss paid tribute to the physicians leaving the service and said their contributions to the Army medical service had been invaluable.

General Bliss stated that he expected the overseas quotas would be filled by sufficient number of applicants who will seek to take advantage of the opportunity for the invaluable medical experience to be gained overseas as well as welcome a three or four month respite from the rigorous training program in which they are now engaged.

General Bliss asked his hospital commanders to give particular consideration to the family status of officers selected and asked that the medical officers be given, insofar as possible, a choice of temporary service in Europe or the Far East.

The critical shortage will end in August, the Surgeon General said, as physicians completing current training programs become available during that month for duty assignments. He expects the current high standards of overseas medical care will be maintained by this measure.

The Army teaching hospitals whose students will be eligible to apply for temporary overseas assignments are: Walter Reed General Hospital, Washington, D. C.; Brooke General Hospital, San Antonio, Texas; Fitzsimons General Hospital, Denver, Colorado; Letterman General Hospital, San Francisco, California; Madigan General Hospital, Tacoma, Washington; Oliver General Hospital, Augusta, Georgia; Valley Forge General Hospital, Phoenixville, Pennsylvania; Tripler General Hospital, Honolulu, Hawaii; and Gorgas Hospital, Panama Canal Zone.

STATE MEDICINE IN A SWEATSHIRT

Teddy Hayes, who became a figure of some public prominence when he used to trail Jack Dempsey and Mickey Walker into championship rings, sweatshirt-clad and carrying a water bucket, is now a statesman.

A congressional committee has dug him out from under the protecting wing of Oscar Ewing, the archangel of socialized medicine. Ewing denied that he put Hayes on his payroll at $10,000 a year at the urgent insistence of Paving Blocks Flynn, the Democratic boss of the Bronx. Ewing's way of putting it was that he had "consulted" Flynn.

Hayes has the title of assistant federal security administrator, with a special assignment as congressional liaison officer. His experience in the prize ring developed his aptitude for such work. We never heard of a trainer who didn't have his own special, secret, super-liniment. He can apply the old oil to senators and representatives who may have some doubts about political medicine and leave them redolent of wintergreen.

In justice to Hayes, it should be recorded that he took off his sweatshirt and put on a necktie some years ago. The congressmen were interested in his connection recently with a Mexican lottery that proposed to sell tickets in the United States, in violation of the law.

There was such a lottery, and Hayes was interested in it. He was buzzing around Chicago not too long ago, trying to get some prominent educators to front for his deal, on the grounds that the profits were going to be used for the promotion of education.

That is not said in derogation of Hayes. It may be questioned whether experience in exorcising charley horses and making ringside repairs on cut eyebrows is exactly adequate for the assistant director of the organization that proposed to furnish medical care to everyone in the United States, but his experience in the lottery field will be of undoubted value.

Ewing is shilling for a lottery himself. All you do is turn in your ticket and he will supply a healer to cure your cancer or the graduate of some mail order veterinary college, whose second cousin happens to be the Democratic boss of some county in the Ozarks, to tell you how to guide your children through whooping cough and chickenpox. Everything will be free. All Ewing wants is 5 per cent of your pay check every week.

Carping critics may bring up the point that Teddy's lottery didn't pay off. So what? Neither will Oscar's.—Editorial, *Chicago Tribune,* Feb. 12, 1950.

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Hamblen, E. C.: North Carolina M. J. 7:533 (Oct.) 1946.

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*Perloff, W. H.: Am. J. Obst. & Gynec. 58:684 (Oct.) 1949.

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Editorial Comment

CHURCH AND STATE IN ENGLAND

Dr. Geoffrey Fisher, archbishop of Canterbury, and several Anglican bishops have expressed concern over England's economic plight, and an interdenominational body of physicians and clergymen has criticized the system of socialized medicine as destructive of a sense of personal responsibility.

The church has shown a considerable degree of independence in challenging the acts of the regime. It would have been insensitive to developing tyranny if it had not, for petty injustices abound in the socialist order, and in the normal course of things they may be expected to grow worse. The effects of this intervention in the approaching election cannot be prophesied, but, plainly, the socialists fear them or they would not be commanding churchmen to keep their peace.—Editorial, *Chicago Daily Tribune,* December 23, 1949.

ONCE-FOR-ALL PREFERRED

The resounding success of Detroit's Torch Drive and similar drives this year in Michigan is bound to persuade the few not yet wholly converted agencies to the practical wisdom of once-for-all giving. As more and more communities around the country adopt the Torch technique, it is difficult to believe it can be otherwise.

Two national groups, which participated, but with reservations, in Detroit's drive on the industrial level, are to make solicitations in coming weeks of those whose Torch gifts were not made through a place of employment.

These agencies have felt that their programs occupy a place apart, and that their activities are geared to them. It is not in the nature of things that they be expected to abandon long-standing policies willingly.

However, the wishes of donors are entitled to consideration, and in practice, of course, will govern. If givers are convinced that the all-inclusive way of giving is best, we do not see that abstaining agencies can fail finally to go along with them. And Detroit's response to the Torch Fund's call has made it very evident, we think, that a single appeal is definitely preferred.—Editorial, *Detroit News,* December 14, 1949.

ONE MEDICAL CHALLENGE WHICH LAYMEN MUST SOLVE

The two principal medical schools in Michigan have presented the state with a major challenge it is impossible to ignore. They need additional training facilities.

In view of state financial problems and the heavy support guaranteed to local governmental units, it will be difficult for the state to provide the funds. But it would be worse for Michigan to fail to come to grips with the requests.

The public, which has demanded more and more medical services, cannot expect to avoid a shortage of medical men now and in the future unless it is also willing to support the means to train additional medical students.

The University of Michigan has asked for a new out-patient clinic which will enable its medical school to increase the number of students by one-third. Wayne University has asked for funds to build a new medical science building to increase its enrollment by 60 per cent. The two schools estimate that the building programs would cost a total of $5,800,000. Governor Williams has said that he will include the projects in his request for funds at the special legislative session next March, although reserving to the state budget bureau the right to pare down the estimates before that time.

For a state which has fretted over an impending deficit because of increasing costs, $5,800,000 is no mean sum. On a comparative basis, however, that amount is surprisingly small as measured against the funds now being raised all over the state for elementary school buildings. For example, that sum is only slightly more than the amount which Ann Arbor school electors authorized last year to expand their local school system. And it is only a small fraction of what all the local school districts in Michigan raised during 1949 to build new high school and elementary school buildings.

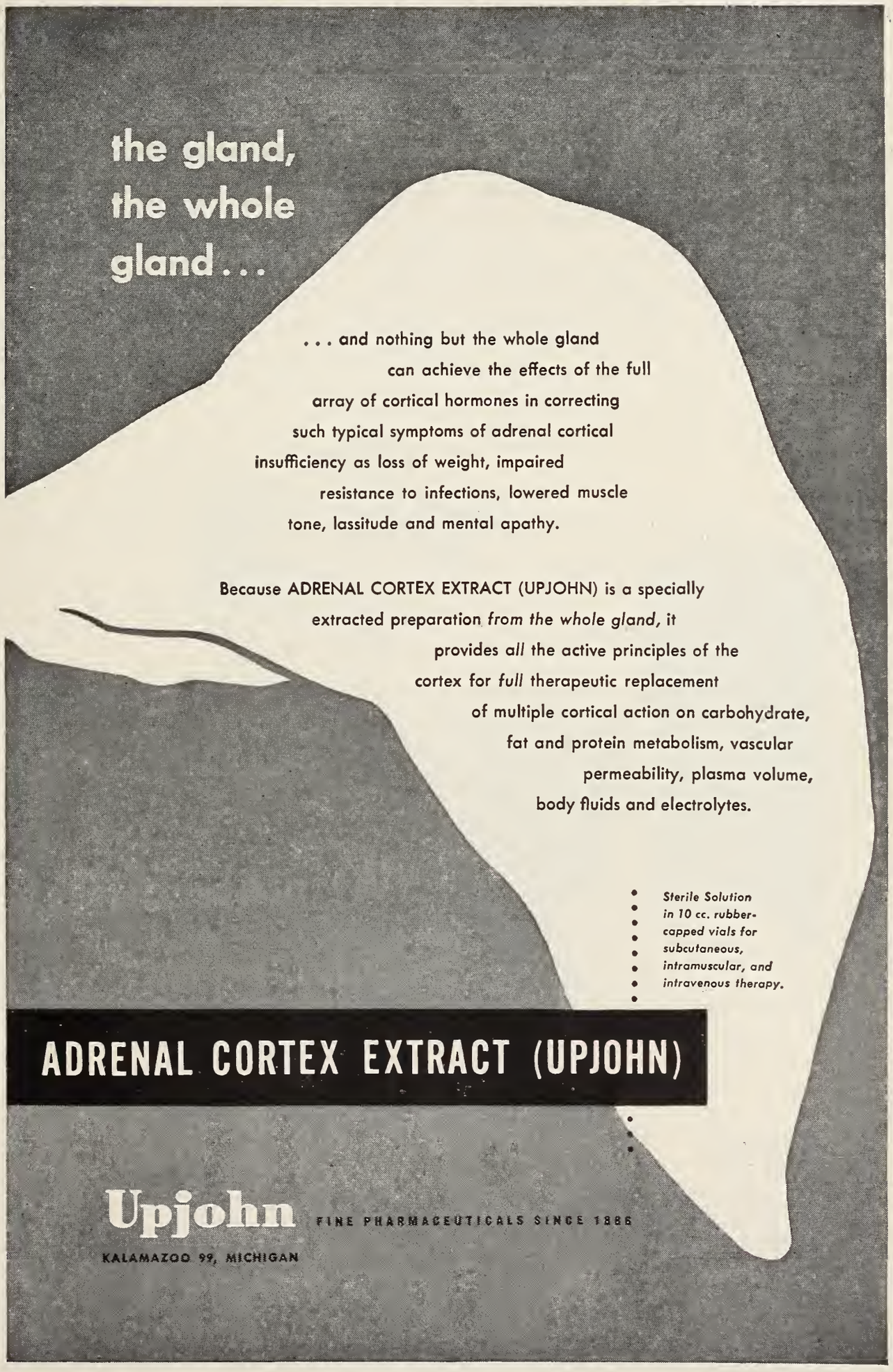
The very fact that communities throughout Michigan are having to invest large sums in schools to meet postwar population increases is a sign of how important it is to train additional medical men to care for a larger population.

There is another point to be considered, too. Medical science has become so complex that the public has demanded more and more specialists—at the risk of creating a shortage of general practitioners. Physicans and surgeons themselves recognize the need for more family doctors. So do medical schools such as the University of Michigan's, which has begun special training for general practitioners under a program financed by the W. K. Kellogg Foundation.

Yet the training of medical men for general practice cannot be expanded at the expense of failing to train enough specialists to employ the most modern advances in the science of medicine. The total number of medical men must be increased.

A medical student from Jackson who is studying at Wayne University recently wrote to his news-

(Continued on Page 156)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ONE MEDICAL CHALLENGE WHICH LAYMEN MUST SOLVE

(Continued from Page 154)

paper to describe the crowded conditions and outmoded facilities which hamper that institution's medical training program. His avowed determination to complete a grueling education despite the surprising handicaps is a tribute to the attitude of medical students working under great handicaps. But it was also an indictment of our provisions for our own medical care.

All the facilities in the world, all the wonder drugs now being developed and all the insurance provisions to cover the costs of medical care will be of limited avail if there aren't enough physicians and surgeons to provide it.

Since the war, thousands of bright young men and women in Michigan have been unable to pursue medical training because our universities were unable to admit more than a few hundred each year.

Considered in this perspective, the request for the state to finance added medical school facilities looms as one project which the legislature will have to find some means to approve.—Editorial, *Battle Creek Enquirer and News,* January 7, 1950.

IS THIS THE PATTERN WE WANT?

Quoting from *The London Daily Mail,* newspaper for November 19, 1949: "Lord Horder, one of the King's doctors, accused the labor government today of putting undue controls on the medical profession. Great Britain's socialized medicine program, he said, recently posted a notice in one hospital reading, 'Operating theatre will not be used except between the hours of 9:00 a.m. and 5:30 p.m.' Another example of government control, he said, was an order to hospitals saying, 'Use of penicillin in this hospital must be cut down. It is too expensive.' "

This quotation demonstrates more clearly than thousands of words the actual results of a socialized medicine program. Imagine your child with an emergency appendectomy necessary at midnight and your doctor being told that he could not use the operating room until 9:00 a.m. There is no appeal—the answer would always be, "Sorry, it is government regulations." On this side of the water, the advocates of a government health program push aside the element of cost, but apparently where the program is in actual operation, it does become a vital factor. If penicillin is found too expensive, what of the other new wonder drugs which may be developed? We have had the suspicion that health facilities and services under a government program would be governed by many factors other than the good of the patient. When the race is for the life or death of a loved one, or of yourself—death will not take a holiday while the red tape of bureaucracy is being unraveled to see what can be done. This system in actual operation speaks more eloquently than all the pressure of the advocates of national health insurance in our country.

Your congressman is home now. Talk to him about your reaction to the program. Write to your senators. It is the health and even the life of your family and yourself that is involved.—*Pontiaction* (Pontiac Chamber of Commerce), December, 1949.

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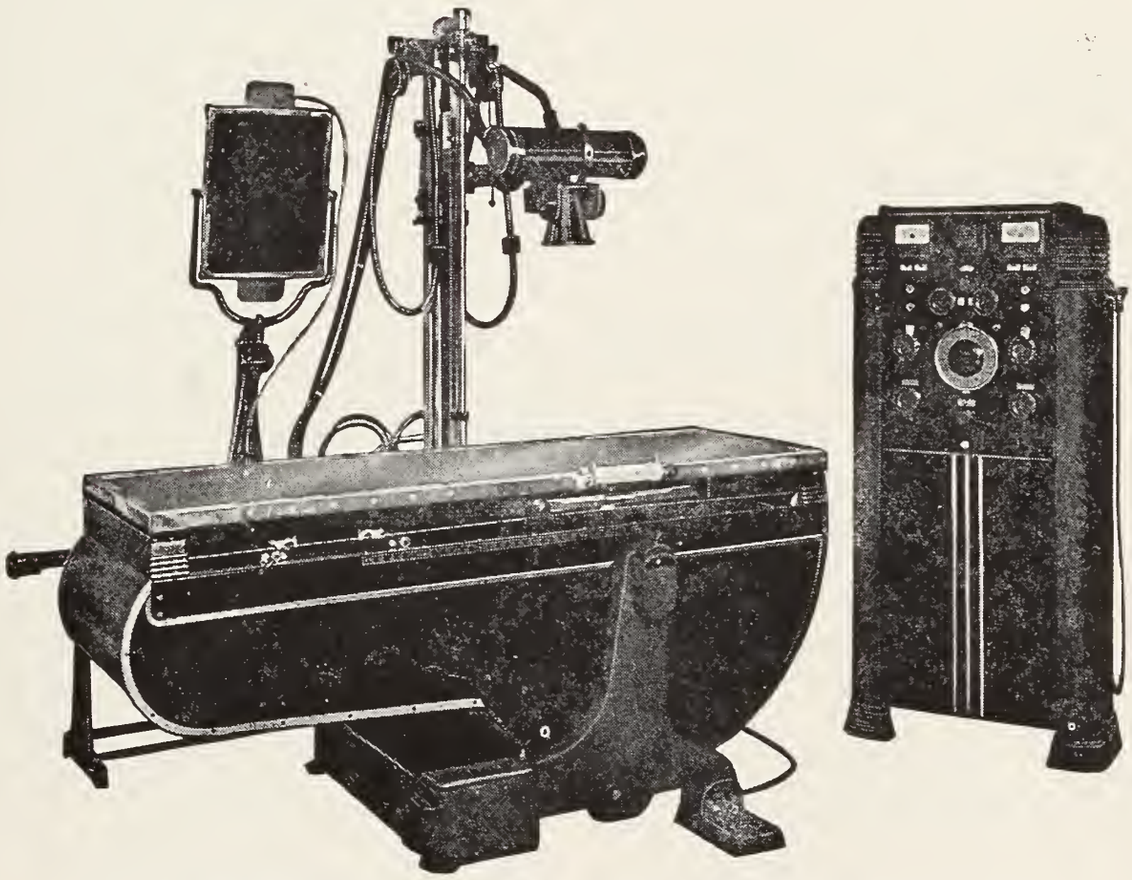

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Political Medicine

STATE OF THE UNION

The President's State of the Union message, requesting members of Congress to carry out his program, commanded most attention during the first week of the second session. Here are the President's exact words concerning social security and health:

"Our social security system should be developed into the main reliance of our people for basic protection against the economic hazards of old-age, unemployment, and illness. I earnestly hope that the Congress will complete action at this session on legislation to increase the benefits and extend the coverage of old-age and survivors' insurance. The widespread movement to provide pensions in private industry dramatizes the need for improvements in the public insurance system.

"I also urge that the Congress strengthen our unemployment compensation law to meet present-day needs more adequately. The economic downturn of the past year was the first real test that our system of unemployment insurance has had to meet. That test has proved the wisdom of the system, but it has also made strikingly apparent the need for improving its operation and increasing its coverage and its benefits.

"In the field of health, there are immense opportunities to extend to more of our people the benefits of the amazing advances in medical science. We have made a good beginning in expanding our hospitals, but we must go on to remedy the shortages of doctors, nurses, and public health services, and to establish a system of medical insurance which will enable all Americans to afford good medical care."

The President spoke to a joint session made up of the membership of the Senate, House, Supreme Court, Cabinet, and foreign dignitaries, who occupied seats on the floor of the House, together with spectators who filled the gallery. His annual speech was read from the Speaker's rostrum of the House Chamber. The President did not advocate "compulsory" health insurance.

Said Senator Robert A. Taft (R.-Ohio), Minority Senate Leader:

"When Congress has completed its task, I am inclined to think the Truman administration will have to go to the people in November in its program of a controlled economy and a hand-out state with increased taxes to pay for it."

* * *

GOVERNMENT "SURVEYS"

The Ewing Report asserts that we now have the knowledge to "prevent" 325,000 deaths every year, and it implies that only the negligence and backwardness of the medical profession stand in the way.

Now, this is a very interesting thought. We would all like to "prevent" death if we could. But unfortunately, the government is twisting figures in this kind of argument. No one can "prevent" death. The best the medical profession can ever do is to postpone death —give us more years to live.

And this is exactly what the medical profession has been doing. Twenty-five years ago, a newborn child had an average life expectancy of fifty-eight years. Today, it has risen to sixty-eight years. In 1933, the rate of maternal deaths in childbirth was 6.2 per thousand. In 1947, just fourteen years later, it had fallen to 1.3 per thousand.

Yet, in the midst of this great surge of medical progress, we are confronted with a government study which argues that medical care is not "adequate." Of course it is not. It never will be, under any system. We will always want progress beyond what we have. But so far, the evidence is strong that the medical profession is delivering the goods.—*Insurance Economics Surveys,* December, 1949.

* * *

The government chooses to ignore the fact that on July 1 of this year 65,000,000 Americans were covered by insurance for hospitalization, 39,000,000 were covered for surgical care, and 15,000,000 for general medical care. All this was done voluntarily.

Now, if more than one-third of the population can be covered by voluntary hospital insurance at a time when the plans are still relatively new, the government has a weak case in arguing that compulsion is the only answer. *Insurance Economics Surveys,* December, 1949.

* * *

A RESOLUTION

Whereas, the medical and dental professions of this country have established the world's highest standard of health care under a system of free enterprise, thereby helping the United States to become the healthiest major nation in the world; and,

Whereas, the benefits of this high standard are now available to the majority of the people of this country and are rapidly being extended to all others through voluntary health insurance plans; and,

Whereas, the government control of medical and dental services in other countries has resulted in a gradual breakdown of free enterprise and a progressive deterioration of professional standards, to the detriment of the health of the people; and,

Whereas, it is the opinion of the members of this Association that it is not in the interest of the people of this country to place health facilities under any form of federal control; now, therefore,

Be It Resolved, That the National Association of Medical-Dental Bureaus, Inc., meeting in its eleventh annual convention in Denver, Colorado, September 21, 1949, does hereby go on record against any form of compulsory health insurance or any system of political medicine inevitably resulting in bureaucratic control; and

That a copy of this Resolution be forwarded to the President of the United States, to each Senator and Representative now in the Congress of the United States, and that said Senators and Representatives be and are hereby respectfully requested to use every effort at their command to prevent the enactment of such legislation.

Adopted at Eleventh Annual Convention, National Association of Medical-Dental Bureaus, Inc. Denver, Colorado, September 21, 1949.—*The Bureaugram* October, 1949.

Even a flood...

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It was spring in Marietta and the Ohio River was on its seasonal rampage. In fact, its swollen waters were even licking at doorsteps in the busy downtown section — eagerly reaching higher and higher.

Is it any wonder, then, that one of the town's leading x-ray technicians should be alarmed for the safety of her charge — vital, valuable x-ray equipment in the flood-threatened office of her employer, a well-known Marietta doctor. Quite naturally she telephoned GE's Columbus, Ohio office — told of her plight.

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Physiological Basis of Gall-Bladder Disease and Treatment

By Bruce C. Lockwood, M.D.
Detroit, Michigan

MUCH CLINICAL and animal investigation has clarified our knowledge of gall-bladder physiology and disease and has indicated that biliary stasis, rather than infection or metabolic disorder, is the most common primary etiologic factor.[2,5,6,20] The cause of the biliary stasis is a disturbed physiology of the normal filling and emptying mechanism of the gall bladder (biliary dyskinesia), which precedes and serves as the basis on which develops the pathologic process of stones, cholecystisis and infection.[14,17] Such biliary tract dysfunction may be caused by a number of mechanisms and factors. Most writers on gall-bladder disease have failed to suggest the clinical application of known facts. Practice has not been abreast of knowledge. This seems to justify the following discussion of the classification and treatment of biliary tract disease which seems best to fit physiological knowledge as well as the clinical picture actually seen in patients. A careful clinical examination is necessary and usually indicates the category in which the patient should be placed as well as the indicated therapy.

Physiolology

The gall-bladder mechanism converts the continuous liver secretion to an intermittent discharge into the duodenum. The secretory pressure of the liver bile is about 300 mm. bile. Between meals the sphincter of Oddi remains tightly closed in tonic contraction capable of withstanding a pressure of 600 mm. bile; however, when the pressure in the common duct exceeds 75 mm. bile the valves of Heister yield and bile flows into the gall bladder. In the gall bladder water is absorbed and the bile is concentrated to 10 to 20 per cent of its original volume. The gall bladder secretes about 25 c.c. of mucus daily. It also has definite motor activity, the most common type of which is a tonic contraction lasting ten to twenty minutes, with an expulsive power of about 300 mm. bile.[8,9]

The gall bladder empties by an interplay of three mechanisms: (1) cholecystokinin, a hormone liberated in the duoednum by fatty chyme, fatty acids or HCl, which when absorbed causes the gall bladder to contract; (2) law of contrary enervation (Meltzer-Lyon) whereby there is a relaxation of the sphincter of Oddi when the gall bladder contracts; (3) a nervous control through the autonomics, in which the tone and rhythm and irritability depends on ganglia in the viscera, but may be influenced by outside stimuli such as emotions, reflexes and toxemias. Stimulation of the vagus by choline or pilocarpine causes contraction of the gall bladder and relaxation of the sphincter of Oddi, while stimulation of the sympathetics by adrenalin causes relaxation of the gall bladder and contraction of the sphincter of Oddi.

Classification and Treatment

For practical purposes gall-bladder disease is best classified according to etiology and clinical type.

Gall-Bladder Stasis Due to Biliary Dyskinesia

Biliary dyskinesia is a term used to indicate a

From Deparement of Internal Medicine, Harper Hospital.
Presented at a meeting of the Detroit Gastroenterology Society, February 15, 1949.

disorder of the filling and emptying mechanism of the gall bladder; it is a functional motor disorder.[10] Its mechanism is similar to that of constipation; in fact, the two conditions occur together so often as to indicate a common etiology.[18] Constipation may be of the atonic type with absence or diminution of peristalic waves and absence of pain, or it can be of the spastic type, with the occurance of local spastic areas and colicky pains.[11] Likewise, biliary dyskinesia can be of the hypotonic type or of the hypertonic type. In the former, pains are not present unless inflammation or stones have supervened. In the latter, pains may be present without an organic pathologic condition, and at times such pains may be severe enough to simulate those due to stones. There is a misunderstanding among many clinicans, in that their concept of biliary dyskinesia seems to include only the severe spastic painful types of the disorder, and not the other less dramatic and less acute motor dysfunctions.

A survey of patients shows that some type of biliary dyskinesia is the initiating stasis factor in about 80 per cent of gall-bladder diseases. Stones and cholecystisis come later in the disorder.[4]

Hypotonic Biliary Dyskinesia.—In this type of functional motor disorder of the biliary tract, the gall bladder does not adequately contract and empty. This may be due to an absence or diminution of the normal stimuli which cause such contraction, or to a constitutional low reflex activity.

Typical patients with this condition are well described as "fat, fair and forty, and belching gas." They usually give a history of eating very little or nothing at the morning and noon meals and an average meal at night. Careful and insistent questioning however reveals that many calories are consumed as carbyhydrate pastry snacks throughout the day. Thus gall-bladder contraction has been stimulated only once per day for possibly many years—hence gall-bladder stasis and the development of stones and often inflammation.

The symptoms are usually mild epigastric distress, bloating and belching, coming soon after eating. Atonic constipation with the cathartic habit is common. This type of dyskinesia initiates about 40 per cent of all gall-bladder disease cases.

X-ray examination usually shows a large pear-shaped gall bladder with moderately good filling and concentration of the dye but rather sluggish fat meal concentration. Later there is often a single large cholesterol stone. It is a lazy atonic gall bladder, and when inspected after operative removal, the wall is thin, unless, as often occurs late in the disease, a chronic fibroid cholecystitis has supervened.

Duodenal drainage usually yields a small quantity of dark bile after magnesium sulphate instillation, but better results follow olive oil; cholesterol crystals are generally found in the dark bile. On gastric analysis there is low or absent hydrochloric acid secretion.

The basal metabolic rate is often below normal, and the blood cholesterol above normal.

Treatment of Hypotonic Dyskinesia.—The condition responds well to medical management. In the obese, a 1200 caloric balanced diet is advisable until the ideal weight has been attained, then a normal balanced diet. Three balanced meals should be taken daily, each containing a tablespoonful of olive oil, with one or two cubes of vegetable butter substitute in order to promote evacuation of the gall bladder three times daily. Fats of animal origin high in cholesterol such as butter, cream, egg yolk, fat meat, brain, kidney, pancreas and salmon should not be eaten. If the stomach acid is low or absent, dilute hydrochloric acid should be taken with each meal to promote the formation of cholecystokinin and stimulate gall-bladder evacuation. In low basal metabolism the administration of thyroid extract is indicated. Constipation should be corrected by diet, supplementary vitamin B foods, such as wheat germ or powdered yeast, and hydrophilic vegetable bulk producers.

Bile stasis, if not properly treated, is eventually followed by cholesterol precipitation and stone formation. When stones have formed, the symptoms usually do not change much until a stone becomes impacted in the neck of the gall bladder, when attacks of colicky pain may develop. When the stone has become permanently fixed in the gall-bladder ampulla, the colicky pains may diminish because the gall-bladder wall tends to become atonic. Discomfort in the right upper abdomen may then become more constant with exacerbations occurring after fatty meals. Soon the gall bladder becomes distended and inflamed and cannot be visualized in cholecystography. To prevent such progressive complications, operation

is indicated when stones have formed. If it is not carried out, the gall bladder becomes thickened, fibrotic and contracted, with superimposed infection spreading to the common duct and liver.

Hypertonic Biliary Dyskinesia.—The dysfunction here lies in the sphincter of Oddi at the lower end of the common duct. There is an increase of tone and spasm with hypertrophy of the muscle fibers, resulting in increased resistance to the contracting gall bladder emptying bile into the duodenum. The result is stasis, enlarged and muscular hypertrophy of the wall of the gall bladder. Pains may result from spasm of the sphincter of Oddi, increased pressure and distention in the common duct, or contractions of the gall bladder.

The patient with this condition is usually a nervous, tense, anxious ambitious individual who has difficulty in relaxing and who has never learned the art of masterly inactivity.

The symptoms before complications have developed may be very mild. They are similar to or associated with gastric hypersecretion, hyperacid gastritis, duodenitis, duodenal ulcer, spastic constipation, the irritable colon and general nervous tension. At times, when the condition becomes acute and intense, there may be severe colicky pains which simulate stone pains. Such acute dyskinesia pains are relieved instantly by the inhalation of amyl nitrite, whereas the pain due to stone usually requires morphine.

X-ray examination shows normal filling and concentration with delayed evacuation. The gall bladder typically is long and tubular rather than pear shaped. At operation the walls are thickened and hypertrophied. Stones, inflammation and infection appear late in the disease. Regurgitation of pancreatic juice into the gall bladder is found in many cases of cholecystitis when secondary to hypertonic dyskinesia. Such regurgitation is thought to produce a chemical cholecystitis.[3,19]

On duodenal drainage there is usually an irregular response to magnesium sulphate and olive oil. Cholesterol crystals may be present if a good dark bile is obtained.

Gastric analysis shows hyperacidity with a prolonged secretory curve, such as seen in the ulcer syndrome.

Patients with hypertonic dyskinesia cases may be subdivided into several clinical types:

Nervous biliary dyskinesia is a psychosomatic functional disorder occurring in persons of nervous constitutional type. It is manifested by and associated with gastric hypersecretion, hypertrophic gastritis, gastric and duodenal spasm, duodenitis, ulcer and often papillitis, together with increased nervous tension, anxiety and inability to relax. Environmental emotional factors usually are the precipitating influence.

Migraine biliary dyskinesia is a subtype of nervous dyskinesia that is quite common. It merits special mention because of the therapeutic success obtained with ergotamine tartrate. About 50 per cent of patients with gall-bladder trouble have migraine headache attacks.

Reflex biliary dyskinesia is a reflex motor dysfunction initiated by a disturbance in some other abdominal organ, such as diverticulitis, colitis, pregnancy, pelvic disease, kidney tumors, hernia, et cetera.

Secondary biliary dyskinesia may result from local irritation within the biliary tract itself, such as gallstones, inflammatory lesions from regurgitated pancreatic juice, ingested chemicals or allergens; local injury from rough surgery and duct probing, or from congenital anomalies.

Treatment of Hypertonic Dyskinesia.—Unless there are stones, operations on the gall bladder are contraindicated because it is not the source of the trouble. This is the reason for many surgical failures.

A diet should be prescribed which is bland, nonirritating and finely divided, such as is used in ordinary hyperacidity. It should contain a minimum of the high cholesterol foods, such as animal fat, while offering much vegetable, low cholesterol fat at each meal to promote formation of cholecystokinin and assure complete emptying of the gall bladder three times daily. This is best accomplished by administration of 15 c.c. olive oil before and two cubes of margarine with each meal. These fats also promote the formation of enterogastrone which lessens acid secretion. An intake of 2000 c.c. of water daily is important in promoting an abundant thin bile.

Alkalies such as calcium carbonate, light magnesium oxide or the silicates should be used to neutralize hyperacidity. Sedatives and antispas-

modics, especially a combination of belladonna, phenobarbital and sodium nitrite or mannitol hexanitrite, are of value. Bile salts help in the stimulation of the liver to secrete more thin bile, but they do not promotc thc emptying of the gall bladder into the intestine.

A mode of life should be followed which allows and promotes relaxation, avoidance of emotional strain and fatigue.

Psychotherapeutic methods should include: (1) reassurance, which can only be given after thorough medical examination; (2) a friendly attitude; (3) an explanation of the mechanism by which emotional disturbances influence the physiology of the involuntary system; (4) a sublimation of abnormal psychic tendencies into harmless, useful, entertaining, social or educational channels; (5) environmental changes and advice in connection with type of work, climate, location, marital troubles or living within income.

A careful search for and elimination of conditions which might cause reflex biliary dyskinesia should be instituted. Stasis in this condition occurs commonly in pregnancy and probably accounts for the frequent development of stones.[7,15]

Gall Bladdcr Stasis Due to Congenital Anatomical Defects

Such defects are etiologic factors in about 5 per cent of all gall-bladder disease. The following are most frequently found[13]:

1. Gall bladder deformities such as the folded fundus gall bladder, Phyrgian cap, abnormal septa in gall bladder, double gall bladder, diverticulum of gall bladder. These comprise the great majority of congenital deformities. They are diagnosed only by careful x-ray examination.

2. Cystic duct convolution; Heister valve obstruction.

3. Abnormal cystic artery crossing and compressing the cystic duct.

4. Congenital cysto-duodenal fold and adhesions distort the cystic duct producing partial obstruction.

5. Stricture of common duct or ampulla of Vater.

Treatment for these congenital defects is almost entirely surgical, by cholecystectomy or removal of the obstruction.

Primary Gall-Bladder Infection

Primary infection accounts for only about 10 per cent of gall-bladder disease. It may occur as a result of some general infection, tonsillitis, pneumonia or the like, or some abdominal infection such as appendicitis, diverticulitis, colitis, et cetera.

Secondary infection, inflammation and stones occur usually after long-continued biliary stasis.

The only organisms which can live in bile are the typhoid, colon, Friedlander and Welch bacilli. The streptococcus and staphylococcus are destroyed by bile, but may be found in the gall-bladder wall or in the cavity in cases of old cystic duct obstruction and gall-bladder empyema.[1]

Hepatitis, focal or diffuse, often occurs in general sepsis and may be associated with cholecystitis, pancreatitis, appendicitis or colitis through the lymphatic net-work that interlaces between the gall bladder, liver, pancreas, duodenum, appendix and ascending colon. In this condition the bile may be altered, with concentration and precipitation of mucus, or the precipitation of calcium bilirubinate as small dark irregular pigment granules.[16]

Repcated attacks of acute cholecystitis lead to the chronic form with fibrotic contraction, calcium carbonate in wall of lumen, empyema, cholangitis and hepatitis.

Acute cholecystitis may result from and follow some acutc general infection such as sepsis, tonsillitis or pneumonia, but more often it is an acute exacerbation of a chronic condition due to previous stasis, inflammation, cystic duct obstruction or stones.

Sypmtoms of acute cholecystitis are severe continuous ache or pain in the right upper abdomen which may radiate to the back under the right scapula along the spinal segment of the eleventh and twelfth vertebrae. It may also radiate, in cases of localized peritonitis, to the right shoulder due to phrenic nerve irritation and over skin areas suppled by the third and fourth cervical spinal segments. There is often septic fever with chills, a whitc blood cell count from 10,000 to 20,000, and tenderness and spasm of the right upper abdomcn. An enlarged liver indicates cholangitis and hepatitis. An enlarged gall bladder may develop if the cystic duct should obstruct. There may be slight jaundice. X-ray dye examination shows no gall-bladder function.

The treatment of choice for acute cholecystitis is early operation, the operative mortality being lowest if done during the first week. If operation is delayed, the condition may subside but will recur sooner or later. Medical management consists of complete bed rest, hot applications, a diet of small two-hour feedings with no fat, and the use of penicillin, sulfadiazine or streptomycin as in any other acute severe infection.

Chronic cholecystitis is a common cause of chronic digestive symptoms. Three types of symptoms may be present: (1) Acute severe attacks of right upper abdominal pain, bearing no relation to meals but occurring often at night or after exertion. In this group 75 per cent are found to harbor gallstones. (2) Constant dull pain or soreness in the right upper abdomen. About 25 per cent of these have been found to have gallstones. (3) Epigastric bloating and distress or epigastric or substernal burning coming soon after meals, with occasional nausea and vomiting. This is a reflex stomach dysfunction. Stones are found in about 20 per cent of this group.

Metabolic Disorders

Metabolic disorders are responsible for only about 5 per cent of gall-bladder disease. There are two types:

1. Congenital hemolytic jaundice, characterized by increased red blood cell fragility. Calcium bilirubinate gallstones have been found in about 60 per cent of these cases. The treatment is splenectomy. (In cases of splenic anemia, gallstones are also very frequent).

2. Hypercholesterolemia. This is found in obesity and in pregnancy, in both of which gallstones are prone to develop. Here, biliary dyskinesia and stasis are also present, and it is improbable that a high blood or bile cholesterol alone could cause the formation of gallstones without the presence of gall-bladder stasis.

Summary

There is ample clinical and experimental evidence that gall-bladder disease is the result of biliary tract stasis, and that such stasis may be caused by a number of different factors: (1) biliary dyskinesia of either the hypotonic or the hypertonic types; (2) congenital anatomical defects; (3) infection; (4) metabolic disorders, in which increased blood hemolysis and hypercholesterolemia play a part. The presence of stones and inflammation constitutes a late stage of the disorder.

The diagnosis can usually be made by careful and complete clinical study.

The treatment depends upon the category and the stage of the disease. There is no single form of treatment suitable for all types of gall-bladder disease.

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Iritis and Iridocyclitis

Review of Past and Present Ideas

By Neil Bentley, B.A., M.D., F.A.C.S.
Detroit, Michigan

THE EXPERIENCE of having practiced ophthalmology for forty years gives one a vantage point that is very interesting. I think one of the most instructive talks ever given before this club was one given by Dr. Eugene Smith, Sr. He could tell of the eye surgery done before the days of cocaine and how cataracts were removed without this aid; of work done before the days of asepsis. Of course I do not have Eugene Smith's wealth of experience nor anything like his tenure in practice. Yet looking back over forty years is an experience that most of you have yet to attain.

I well remember a young woman who came to me with an acute iritis in my first years of practice. At that time, we expected such cases to run about two months. Some twelve years later she returned with another attack of the same disease. Billings and his co-workers had opened our eyes to some new horizons. This time I was able to relieve the iritis in a much shorter time. She remarked to me, "Doctor, you have treated me quite differently this time than when I was here before." It was a remark that has stayed by me. It is for this reason I thought a review of our ideas of forty years ago as compared to today might be of interest to all of you.

My first book on ophthalmology was by Samuel Theobald, clinical professor of ophthalmology and otology in Johns Hopkins University, and it was published in 1906. Please note that he was a professor of ophthalmology and otology. These two specialties were still taught by one man at Ann Arbor at the turn of this century and prior to the coming of Doctors Parker and Canfield to the faculty. Dr. Theobald's paragraphs on the symptoms of iritis are still sound. However, his ideas on its etiology present a different picture. He regarded syphilis as the most prominent cause of iritis. A pathognomonic, yet not constant, feature of syphilitic iritis is the formation on the anterior surface of the iris of yellowish or reddish brown nodules. Usually there are only one or two present, but it is claimed they may be so numerous as to fill the anterior chamber. They appear in the pupillary zone or in the ciliary border. They occur more frequently in the iritis which develops during the secondary stage of syphilis. Those met with in the tertiary stage are gummatous in character. Traumatism is given second place, "not only when the iris itself is involved in the injury, but also when the cornea, lens or ciliary body is wounded."

Rheumatism and gout, diabetes and the acute infectious diseases are also mentioned. Of course, gonorrhea, especially when accompanied by gonorrheal arthritis, is given a prominent place. There is no mention, of course, of the prostate. Ulcers of the cornea, of course, were recognized as causing an iritis.

His description of sympathetic iritis is still sound reading, which indicates we have not accomplished much in treating this dreaded complication.

He recognized three kinds of iritis: plastic iritis, purulent iritis and serous iritis (descemetitis, uveitis). This last we recognized as cyclitis. The deposits on the posterior wall of the cornea were recognized for what they are.

For treatment he states the most valuable drugs are mercury, potassium iodide and the salicylates, with opium for pain. This about completes his list.

In 1913, De Schweinitz made a report to the International Medical Congress in London. At that time he presented the results of a questionnaire received from seventy-four ophthalmologists who reported oral sepsis, infected tonsils and sinus infections as a cause of uveitis, while twenty-four considered gastrointestinal toxemia as the cause of iritis. He claimed that bacterial toxins never produced iritis but that the bacteria themselves are present in the lesion. Lang, in 1913, published reports that he found dental infection as the cause of eye diseases in 40 per cent of 176 cases of iritis. In De Schweinitz' textbook published in 1921, at which time the Wassermann test for syphilis had been developed, the causes of iritis were given as depending on constitutional disorders, infections, toxins and traumatism and upon disease in other portions of the eye. He divided iritis according to its supposed etiology into syphilitic, rheumatic, gouty, gonorrheal, diabetic, tuberculous, scrofulous, septic, auto-toxemic or toxemic, cachetic, traumatic and sympathetic iritis.

His figures state that "among syphilitics 0.42 to 5.37 per cent according to different authors develop iritis. However, among cases of iritis, syph-

Read before the Detroit Ophthalmological Society, March, 1949.

ilis has been found to be the cause in from 30 to 60 per cent."

By 1921 the Wassermann test had been developed and salvarsan was in use, yet syphilis was still regarded as the causative factor in from 30 to 60 per cent of the cases.

In Fuch's textbook, the 1923 edition as translated by Duane, the etiology of iritis in the primary form is: (1) iritis syphilica, (2) iritis gonorrhoica and focal iritis, (3) iritis in acute infectious diseases, (4) iritis in disorders of metabolism—gout and diabetes, (5) iritis tuberculosa. In iritis as a local affection he classifies it as: (1) traumatic, (2) sympathetic iritis.

He gives syphilis as by far the most frequent cause of iritis. At this date he mentions focal iritis due to diseases in the genito-urinary tract or to the colon bacillus. He also mentions the tonsils, teeth—especially pockets at the roots of dead teeth —or the nasal sinuses. I can't help thinking that Duane himself must have written this paragraph. When I was in Vienna in 1929, I saw a case of recurring corneal ulcers. The man in charge, who was in Lindner's service, explained the difficulty they were having. Syphilis and tuberculosis had been ruled out. He said, "You know, Doctor, we are coming to think it may be from some focus of infection." I asked permission to examine the patient, and permission was readily granted. The incisor teeth were all sound, but all the molars and biscupids had been rotted down to the gum line. After several months, they were just coming to the idea that the recurrences might be due to focal infections.

However, I think we have viewed the past sufficiently. Do you remember those lines of Henry Van Dyke: "I know that Europe's wonderful, yet something seems to lack. The past is too much with her and the people looking back. But the glory of the present is to make the future free?"

The matter of focal infections was thrown into the limelight by Billings and his co-workers in 1912. It was accepted as the cause of many diseases, and a wave of enthusiastic surgery followed. The tonsils could be removed without material damage to the patient unless performed by an incompetent surgeon. The nasal sinuses were exploited on a grand scale. We must remember that up to 1900 doctors didn't know there were such things as nasal sinuses except as anatomical peculiarities. Then when pus was found in them another wave of sinus surgery followed. Do you remember the radical frontal surgery by Killian and his followers? He was a great pioneer in bronchoscopy and nasal surgery. He died in 1921; and may his soul rest in peace. Some of the cases operated in Germany had horrible frontal defects.

I doubt if any of you have done a radical Killian for many years. When it came to the extraction of teeth, many cases were wonderfully helped along the path of recovery. One of my golfing companions told me he never knew what good health was until he had all his teeth out. However, we soon found many patients who had had all their teeth extracted and yet their diseases still went merrily onward.

The work of Billings was accepted with enthusiasm for thirty years. However, like all good things, it was pushed too far. We found many cases where all foci that could be reached were eliminated without benefit.

There is at present a tendency to scoff at the idea of foci of infection. I heard one of our well-known ophthalmologists, who was featured at one of the postgraduate courses at Ann Arbor, say that he never sees any eye cases due to foci of infection. He excepted arthritis of the knee since he develop such a condition himself and was relieved by removal of a septic focus.

Recent work by Rosenow, however, reaffirms his belief in foci of infection as the cause of many cases of disease. Although the fact of foci of infection and its role in production of disease is accepted quite generally, its exact method of action is not quite clear. The probability is that there are different pathways for the infection reaching the eye. There is much evidence that in some cases a bacteremia develops and actual bacteria lodge in the eye. Positive blood cultures have been found in cases of tuberculosis and in other cases streptococci have been recovered from the bloodstream. This is probably quite a common occurrence, yet nothing happens in the majority of cases, as the organisms are short-lived in the blood stream. The resistance of the patient is able to overcome the invaders. However, if the patient's resistance is below par, the infection can lodge and produce diseases we can recognize. Rosenow's work on selective affinity of germs isolated from teeth or tonsils in cases of iritis was quite striking. He has repeatedly demonstrated the correctness of his views, and of course he had Benedict to work with him. This work was corroborated by Irons, Brown and many others. However, Levy and his

associates and Back failed to reach this positive finding. It must be admitted that Rosenow is a hard man to equal when it comes to a study of bacteria. Lowenstein of Vienna found the tubercle bacillus in the bloodstream of 14 per cent of spontaneous cases of uveitis. His technique is difficult to reproduce, and not as much attention is given him as he deserves.

Cultures injected into the bloodstream have produced ocular lesions from which the injected bacteria were recovered. In the cases of endogenous infections in which emboli form in the eye, we usually expect a very severe reaction that goes on to panophthalmitis. These cases are not common. In the majority of the cases, however, there is no demonstrable bacteremia, the eye being the only organ singled out. It has been suggested that in these cases the toxins either liberated by the bacteria or by autolysis of dead microorganisms find their way into the bloodstream and thence into the eye.

The fact of allergy has been abundantly proven. In 1911 Wessely made an intracorneal injection of a protein that set up a keratitis. After this healed, a later injection was made into the cornea of the other eye. A violent reaction ensued, causing an interstitial keratitis identical to that caused by syphilis.

Traut in 1934 found streptococci in the bloodstream of five cases of iritis. The work of Brown and Irons is noteworthy in that they were able to follow up a series of fifty cases of iritis that were observed from three to twelve years. Forty-three remained free of recurrences, although over half of them had several recurrences before this study started. Seven of his series had recurrences of iritis, but these recurrences were all in cases where the focus of infection was not removed or could not be removed. This is very strong evidence of the importance of removing these foci of infection in iritis.

In the study of syphilis and its relation to iritis, there has been a marked shift in opinion. The percentage varies with different authors. Clapp reports 82 per cent of clinic cases and 69 per cent of private cases of iritis as due to syphilis. This was the extreme high and ran down to 13.3 per cent reported by Newton in 1925. In Gifford's report published in 1931, the average of nine authors was 19.8 per cent of iritis as due to syphilis. All are agreed that the average in the colored race is much higher than in the white and greater in the male than the female. In the Army from April, 1942, to 1943, the positive Wassermann tests were 30 per cent for the colored and 4 per cent for the white.

It is interesting to note that Arlt in 1853 reported syphilis as the cause of iritis in 17 per cent of his cases of iritis.

As to the percentage of syphilis present in the population, we can get varied reports. All are agreed that there has been a decrease in the number of cases of syphilis. The Owen Lab reports nineteen positive in 222 blood tests, or 8.5 per cent. However, this includes repeats on known positive cases, so it is too high. On their premarital tests, 1.3 per cent are positive and 0.4 per cent doubtful. In their prenatal cases, 1.3 per cent were positive, 0.4 per cent doubtful. In their diagnostic series 7.1 per cent were positive. In their treated cases, 22 per cent were positive. In 1945, their premarital tests were 3.3 per cent positive; in 1946 their premarital tests were 2.2 per cent postive. Dr. Clarence Owen, our pathologist at Grace Hospital, reports that there is much less syphilis at autopsies than formerly. He hasn't encountered a syphilitic newborn in twenty years —this was an off-the-cuff figure. Stokes, in his book, Modern Clinical Syphilology, published in 1944, states that 30 to 40 per cent of iritis is due to syphilis and that iritis constitutes 73.3 per cent of the total eye complications of early syphilis.

In 1931 a very thorough study of syphilitic iritis was made by Dr. Joseph Moore of Johns Hopkins Hospital from a series of 10,000 cases of syphilis; 249 cases of syphilitic iritis were studied. The large majority were negroes. Their ratio of positive Wassermann tests of colored to white was 2 to 1. They also found that iritis was twice as common in relapses as in the original early secondary syphilis, and that it was fairly common in late syphilis.

A generalized skin rash was present in 75 per cent of the patients, and all but one occurred in the colored patients. It was a folliculopapular rash. They found a common association of iritis, the folliculopapular rash and arthritis. Remember this was in 1931. The average duration of the infection was 9.7 per cent years at the onset of the iritis. This shows a very slow start in treating syphilis in 1931. At this same date, trauma was considered an activating factor in 3.6 per cent of the early group and in 8.2 per cent

of the late group. However, it was recognized that these figures are only approximate.

At that date there was the same controversy as exists today. Are the cases syphilitic iritis or iritis occurring in a syphilitic patient? At that date they also found that many cases of non-syphilitic iritis were helped quite materially by arsphenamine products.

While my paper is on the subject of iritis, we recognize that in all cases of iritis the ciliary body, and in fact the entire uveal tract, is involved to more or less extent. Yet in the cases under discussion the predominant localization of the lesion is in the iris. While many cases appear acute, where pathological studies are possible, it is often found that there is a mononuclear infiltration associated with subacute and chronic processes.

I presume it is permissible to describe iritis as exogenous where the infection into the eye is introduced by an injury or from a disease of a contiguous part of the eye—as in a corneal ulcer, a keratitis or a scleritis. This would include those cases following operative procedures. Today we rarely see purulent panophthalmitis following eye operations. When I began practice, we expected to lose about two out of 100. This has been steadily reduced. Col. Smith of India made the greatest reduction in infections by washing out the conjunctival sac with bichloride of mercury 1:4000 just prior to operation. Certainly his aseptic technique was anything but aseptic, yet he cut the incidence of panophthalmitis down to 1 in 2,500 cases.

Dr. Walter Parker pointed out to me that equally good results follow irrigating the conjunctival sac with boric acid as with the bichloride of mercury. Certainly the eye looks much better at the first dressing when the eye is irrigated with boric acid than with bichloride of mercury.

I have felt for a long time that in many of the cases of iritis we see in our own practice or in consultations following operations, the iritis may be due to a mild infection that is not virulent enough to cause pus formation.

Of course, the reaction of the eye to lens substance left in the eye is well recognized, i.e. endophthalmitis phacoanaphylactica.

We are all familiar with the iritis that develops in a degenerated eye or a detached retina.

Traumatic iritis I see not infrequently. We often will have synechia form that resist all efforts to free them. Sympathetic ophthalmitis would be in the class of exogenous infections. I believe most cases of sympathetic ophthalmia today follow intraocular eye operations or penetrating eye injuries, especially through the ciliary body.

Most of the cases of iritis we see are in the class of endogenous infections. A small percentage are from suppurating metastatic lesions. Panophthalmitis is the usual outcome. Most of these patients die from the severity of the general disease.

A lot of experimental work has been done to show that microorganisms injected into the bloodstream do lodge in the eye and produce lesions in the iris, ciliary body and the uveal tract. The same organism can be recovered from the eye lesion.

However, in the majority of clinical cases of iritis there is no way of seeing any organisms or pus formation. It is felt that there may be metastases of very reduced virulence, or the iritis may be due to an allergic reaction to a septic focus found elsewhere in the body, or may be due to toxins resulting from the dead bacteria. The method by which the iris is affected is not certain, and all our ideas on the subject are rather conjectural. Some cases may be genuine allergic reactions.

In many cases the aqueous has been aspirated from the anterior chamber of cases with acute iritis. Smears and cultures were made but all were negative. Woods injected some of the aqueous into the anterior chamber of rabbits with negative results, except in one case where the eye developed a panophthalmitis.

Brown removed five pieces of iris, aseptically macerated the iris and distributed it among several kinds of culture media, but they were all negative except one case where he felt there was a contamination.

In spite of all the negative results, the positive results sway the majority of ophthalmologists to the view that most cases of iritis are infective in origin. In my experience my first effort is to find such a focus. The teeth are all x-rayed, even in edentulous jaws. Retained root fragments or localized diseased bone in the jaw must be eliminated. The teeth must be all tested electrically or by heat and cold. In this way we may locate dead teeth that show nothing on the x-ray plate. These dead teeth or dying teeth are more of a menace than those dead teeth with well encapsu-

lated abscesses at their roots. Rosenow has repeatedly found positive cultures of streptococci in teeth with large fillings, even when they were negative by x-ray and were proved to be vital. Examinations of the pulp showed gross hemorrhages, and cultures were positive for green-producing streptococci. We must remember that in the three-pronged teeth, two of the roots may be dead, but if the third root is vital, a positive electrical test is obtained. Pyorrhea pockets must be drained, and this often means extraction. I well recall one patient who was constantly having recurrences of a kerato iritis. The only focus I could find was a pyorrhea around the lower incisors. His dentist insisted he could cure this pyorrhea. After he stayed with the dentist for two years, yet still showing an active pyorrhea and still having recurrences of his keratoiritis, I insisted upon these teeth being extracted. This was rather easily acquiesced in when he developed an acute keratoiritis while on a business trip to New York. With no treatment while in New York, the eye was so severely infected that I feared permanent damage. However, upon extracting the offending teeth, the eye responded to treatment satisfactorily. There have been no recurrences since the dental extractions. I could cite many such cases, as could all of you.

We then check the tonsils and the nasal sinuses. For the latter a nasopharyngoscope must be used. In no other way can we see the posterior part of the nose. All cases have their sinuses transilluminated. If there is any question as to the sinuses, especially the sphenoids and the posterior ethmoids, an x-ray is ordered.

In examining the tonsils, pressure must be made on the anterior pillars to express debris or pus from the deeper crypts. The appearance of inflamed pillars or pussy discharge is suggestive. A history of frequent sore throat or colds aids us in arriving at a correct view. The mere finding of cheesy debris is not sufficient to condemn the tonsils. Tonsil tabs, however, are often more septic than tonsils unoperated upon.

Naturally all patients who give a history of gonorrhea, or give a history suggestive of it, have their prostate or their cervix examined. The cervix, in my limited experience, is more apt to be a factor in cyclitis or posterior uveitis. I always ask the gynecologist to make a culture from the cervix, following Benedict's paper read before us some years ago. Naturally a gynecologist will make a complete check of the pelvic organs and the fallopian tubes. I have seen some very severe cases of panophthalmitis where there has been a metastasis from a case of puerperal sepsis.

However, it is the prostate and posterior urethra that I find to be the more likely offenders. I have had some very satisfactory results from having the prostate given a finger wave by a competent urologist. Occasionally you may get a nasty flare-up in the iritis. I always feel that this indicates that we are on the right track. Of course, the majority of the cases of chronic prostatitis are non-gonorrheal.

The above cases of focal infection constitute the majority of the causes of iritis in the United States. The group associated with arthritis probably belongs in this class of endogenous infections. We no longer speak of rheumatic iritis. However, the two are often associated, probably because both may have the same etiology.

The relationship of iritis to rheumatoid arthritis and ankylosing spondylitis is still open to discussion. It is always a difficult task to assess the causative factors in any given case of irititis or iridocyclitis.

It is recognized that iritis may occur in a number of acute infectious diseases with joint manifestations. In rheumatoid arthritis and ankylosing spondylitis there is a lack of purulent reaction. There usually is a nonpyogenic inflammatory reaction in the joints, the synovial fluid barrier protecting it from purulent invasion. It has been suggested that the eye is highly but not absolutely protected from infections in the blood stream by the ciliary body. Angevine and Rothbard in 1940 made an intravenous injection of forty rabbits, using a relatively avirulent group A hemolytic streptococci. Group A hemolytic streptococci joint lesions developed in twenty-six rabbits and intraocular lesions in seventeen animals. The primary sites of damage were the synovial villi and the ciliary processes; hence the suggestion of a similarity by Professor Arnold Sorsby is not without merit.

In a series of 123 cases of osteoarthritis there were three cases of iritis, three cases in fifty-three cases of ankylosing spondylitis, and fifteen cases in 332 patients with rheumatoid arthritis. The disease was mild and unilateral in all but two cases. These were in a series reported by Sorsby in the *British Medical Journal.*

I feel that the next most common cause of iritis is tuberculosis. In reviewing the statistics of European authors, as contrasted with American au-

thors, you are at once struck with the big discrepancy in the percentage of tubercular cases. This varies from 36 per cent by Arlt in 1853 to 45.6 per cent by Gilbert in 1929. Butler in England found only 6 per cent; Elschnig found 28 per cent in 1912 and 24.5 in 1925. Brown and Irons found only 4 per cent, Newton 2.6 per cent and Gifford in 1930 found 8.5 per cent.

In Germany and Austria there is undoubtedly much more tuberculosis present than in the United States. However, they are rather apt to assume tuberculosis is present unless they can take enormous doses of old tuberculin without any reaction. The matter of the diagnosis of tubercular etiology is at best a difficult matter to evaluate. I was studying in London when the Calmette reaction was introduced. Everyone hailed it as a sure diagnosis for tuberculosis. I well remember my reaction: nothing that easy could be worth while. Today there is not even a mention of it in Duke-Elder's Index. Among the diagnostic methods it is mentioned in small type, only to be condemned.

The main diagnostic test is the Von Pirquet, and then when used in graduated doses. It is of value in children under five years of age.

The intracutaneous mantoux test in doses 0.001, 0.01 and 0.1 mg. of old tuberculin is the most valuable. It is assumed that a strongly positive test indicates tuberculosis. Yet Braun found positive reactions were only 20 per cent higher in cases of tuberculosis than in nontubercular cases of ocular disease.

Friendwald and Desoff found that in 10 cases of histologically proved tuberculosis of the eye, only six reacted to 0.001 mg., two to 0.01 mg., one to 0.1 mg. and one to 1 mg.

In thirty-six cases of histologically proved nontuberculous origin, five reacted to 0.001 mg. and the remainder varied from a positive response to 0.01 mg. or less to insensitivity.

Moreover, it is not certain that the reaction in the skin is specific for tuberculosis. You can get the same skin reaction in tubercular eye cases by an injection of filtrate of B. coli or an extract of culture-free bouillon.

The production of a focal reaction in an eye by an injection of old tuberculin, in addition to a febrile reaction and a local reaction at the side of the injection, is considered proof of the lesion being tubercular. However, the production of a focal reaction in the eye may be very disastrous and is strongly condemned.

However, a strong skin reaction to .001 mg. of tuberculin is quite suggestive of the lesion being tubercular.

X-ray diagnosis of a likely chest or a glandular tubercular lesion is one of our best diagnostic measures. A chronic lesion, marked tendency to recurrences, lack of response to ordinary treatment with not much pain and an absence of any other cause usually form the basis upon which we diagnose a tubercular etiology. It is usually presumptive. Of course, a favorable response to tuberculin therapy is further evidence of the tubercular etiology in the view of many.

Greenwood calls attention that cases of serous iritis are more apt to be tubercular than are cases of acute iritis. In many of the American reports, the cases reported were private cases, hence less likely to be tubercular.

In all cases of iritis, blood tests for syphilis are made. However, I rarely get a positive result. Dr. Dixon tells me that he rarely sees iritis in his cases of syphilis. Dr. Dixon is in charge of the syphilitic cases at Grace Hospital and was for years in charge of syphilis at the Board of Health. Cases are caught earlier than formerly, and iritis is a symptom of the secondary or tertiary stages. He tells me further that he doesn't see enough of the skin lesions of syphilis to demonstrate what syphilitic skin lesions are to his students.

Of course, syphilitic patients do have abscessed teeth and other foci of infection, and these should be removed. However, I find syphilis a minor factor in iritis.

In all the textbooks, the exanthemata are given as among the factors causing iritis. Measles does cause a conjunctivitis, and with conjunctivitis you may get corneal ulcers, hence a possible iritis. However, Dr. Young at Herman Kiefer Hospital says that the present cases of measles and scarlet fever are so mild and respond so promptly to penicillin that they seldom have complications. He has seen no iritis.

The intestinal tract, with the gall bladder, also is a factor. Herpes zoster occasionally affects the eye but it is a minor factor. It is not given as much attention as formerly.

The symptoms of iritis are so well known that I hesitate to mention them. In the acute cases there will be a circumcorneal injection with pain and edema of the iris. In blue-eyed patients the

iris blood vessels become prominent and the iris becomes muddy in color. The pain may be very severe and radiate to the forehead or to the teeth of the upper jaw. The pain is apt to be worse at night, but not so prominently so as in acute glaucoma. The eyeball is very tender to manipulations. The pupil is narrowed because of the swelling of the iris tissue. Very quickly the slit lamp shows an increased flare in the aqueous, followed soon by cells floating in the aqueous or plastered against the posterior wall of the cornea. Fibrin may be formed as flakes on the anterior surface of the iris or it may fill the anterior chamber. These cells and fibrinous exudate also form on the surface of the lens and the iris. Where the exudate forms on the posterior surface of the iris you get firm adhesions, and if the whole surface is involved you get a condition seclusio pupillae. This may be followed by the familiar iris bombé in later stages, due to blocking of the communication between the anterior and posterior chambers.

The larger clumps of cells—the so-called mutton fat deposits on the posterior corneal wall—are more apt to be due to lesions of the ciliary body.

In severe iritis, folds of Descemets membrane occur, indicating an edema of the cornea. Polymorphonuclear leukocytes may form, but they usually fall to the bottom of the anterior chamber and form the sterile hypopion we are all familiar with.

Where the pupil is blocked by exudate on the anterior surface of the iris, occlusio pupillae develops.

When atropine is instilled, there are usually spots of adhesion of the iris to the lens, the result of adhesive exudate.

Then there is the chronic iridocyclitis, often with acute exacerbations.

Then there is a group of recurrent iridocyclitis with varying periods of quiet intervals. We don't see these cases as often as formerly. Many of these are tubercular or due to foci of infection we have not detected or could not reach.

There is one group of cases that I am always on the lookout for, i.e., the quiet iritis. It may follow a case we have treated. For this reason, I like to have all persons with iritis return at stated periods to check with the slit lamp. I like to dilate them temporarily to be sure no adhesions are forming. Sometimes we will find such adhesions. It certainly is pathetic to see a case of iritis that has been well and successfully treated, then discharged, only to turn up with an eye that has been destroyed by a quiet iritis that could so easily be prevented.

Again in case of corneal ulcer or simple injury, where we can diagnose no iritis, the use of homatropine is invaluable. May I also state that among the common cases I see are persons who have been to the First Aid at the plant and the nurse or the doctor has given the patient atropine ointment. We see them later because they claim they have gone blind. They are thus needlessly incapacitated because of the atropine. I tell all First Aid personnel: throw away your atropine. If a patient needs atropine, send him to my office.

Treatment.—The first consideration is to get the pupil dilated. The best drug for this is atropine 1 per cent in boric acid with the addition of adrenalin, and possibly cocaine in case the pupil does not readily dilate. This can be used every two hours, but usually every three hours is sufficient. Occasionally atropine powder can be placed in the conjunctival sac if the pupil will not dilate. If the face becomes flushed, the finger can be placed over the canaliculus for a few minutes after instilling the drops. After using the atropine for some days, an allergic skin reaction may occur. Some other mydriatic must be used, such as scopolamine hydrobromide 0.25 to 1 per cent, hyocine hydrobromide or duboisine sulfate 0.5 to 1 per cent. Atropine ointment is useful in children. In the latter group, a blepharospasm may develop, washing out the atropine before it gets into the conjunctival sac.

Heat is of great value. The electric pad is a very easy method of applying it. In my office, I find the short wave diathermy very helpful. I never use it, however, if hypopion is present. Occasionally heat irritates the eye and the ice bag will be more comforting.

The search for etiological factors must be started at once. I have already outlined the procedure we follow. I believe in removing the focus very early when found. We like to have the eye under partial control before operating. I don't have bad results following the extraction of teeth, but I limit the extraction to two teeth. I have seen serious—even fatal—results following wholesale extractions.

Very often multiple foci of infection are found. Diseased sinuses should be treated or drained—depending upon conditions. We can't put our

finger on the exact focus that may be causing the trouble. However, if pus is present, the patient will be better off to have it eliminated.

The Wassermann and Kahn tests are always run. They are nearly always negative. These are all in private cases. Don't tell me syphilis is a respector of well-to-do patients. We all know better. However, it is much more common in clinic patients where a large percentage are colored.

In all cases of iritis, I start them at once on sulfadiazine, 15 gr. every four hours with baking soda a teaspoonful to a glass of water. Blood counts are run every three or four days, and if there is any sign of trouble, the drug must be stopped. The urine must be checked. With these precautions, we find no trouble with sulfadiazine. However, I rarely use it more than ten to fourteen days.

The new preparations of penicillin can be used with the sulfadiazine. 300,000 units can be given every second day. However, I don't have so much faith in penicillin in eye infections except in gonorrheal infections.

We must not forget the time-honored eliminative treatment with saline purges. Have you ever had a patient in the hospital who wasn't doing well, had a little unexplained fever and then you found there had been no bowel movements for several days? 'Nuff said.

The salicylates are valuable to control pain, especially when arthritis is also present.

The stimulation of the body immunity is often increased by foreign protein shock. Dr. Frothingham has long urged milk injections—genuine milk and not the substitutes. I have had very good results from it, especially in exogenous infections. You don't want it too fresh. Draw it into the syringe through the needle, thus eliminating any coagulum.

Typhoid injections of 25,000,000 intravenously have a more dramatic effect, but they can only be given to a hospital patient.

In many cases, an increased tension may develop, and then you have a real problem. A paracentesis of the anterior chamber can be done, making a flap-like incision in the periphery of the cornea. This can be depressed easily, the anterior chamber reopened and more aqueous drained off, thus relieving the pressure. This may have to be repeated several times.

Many cases of glaucoma develop during an iridocyclitis. The vascular bed is in a state of congestion, stasis and edema of the tissues. The aqueous is a colloid richer, denser solution than normal. The dialysation of the intraocular fluid is changed and often obstructed. The drainage canals may become clogged. An increase tension is a common result.

It is felt that many so-called acute glaucomas are really secondary to a pre-existing chronic, though mild, iridocyclitis. According to Duke-Elder, "the statistics indicate the percentage may be from 20 to 40 per cent of all cases of raised tension." Many authors claim the percentage would be much higher if a more thorough search were made for low grade types of intraocular inflammation. Needless to say, surgery is to be avoided in the acutely inflamed iris if at all possible. Many of these cases must have the mydriatics pushed hard, combining adrenalin and cocaine to get a synergic action. Hypertonic intravenous injections of sodium chloride or sorbitol may be of value.

In the subacute cases, mydriatics are better used if the anterior chamber is deep. In a new case, try homatropine first. If this aggravates the condition, eserine and pilocarpine can be used. If there is no response to medical treatment, surgery will be needed. The Elliott trephine is perhaps the best operation.

In this review I am struck by the fact that we don't see the syphilis that we saw years ago. Government records confirm this view. As Dr. Schiller said, we see less syphilis and what we see is seen earlier and is brought under control much earlier. When you recall Dr. Moore's statement in 1931, that the cases of iritis occurred in patients who had had syphilis for 9.7 years before treatment then you see that medicine does progress.

I am well aware that there are some questions not yet solved in the matter of iritis. Focal infections are very common in apparently healthy individuals. Yet iritis is infrequent. We know, too, that it is difficult to develop iritis experimentally. Yet after an eye has been sensitized, then experimental iritis is easily developed. Now what sensitizes the eye to activate a focus of infection into causing an iritis? I am in hopes that some of you can answer these questions.

MSMS

Two Essentials.—Every one should own a comfortable bed and comfortable shoes, because he is in one or the other all of his life.

Amebiasis in Veterans

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THE INCIDENCE of amebiasis in American soldiers in World War II has been speculated upon for some time by many authors. Craig,[6] in 1944, estimated that 10 per cent of the population are infected with Endamoeba histolytica, and that thousands of our troops now serving in endemic areas will be coming home infected by the parasite. D'Antoni[8] reports 28.8 per cent incidence of Endamoeba histolytica in 236 clinical cases examined in New Orleans in 1943.

Brown[4], et al stated in 1945 that amebiasis is extremely common and may be considered endemic in the United States. Marion and Sweetsir,[18] in February, 1946, made a survey at an Army Air Base Hospital in Florida and reported 15 to 18 per cent positive findings for Endamoeba histolytica in 1000 unselected cases returning from all theaters. An over-all average of 16.6 per cent was reported with little difference between specific theaters. Michael,[20] in 1946, reported 8.9 per cent infestation with Endamoeba histolytica in 1000 naval returnees, and 3.1 per cent in 1000 ex-prisoners of war. Markell[19] et al, in 1947, reported 27 per cent incidence in the United States civilian prisoners of war returnees from the Pacific theater. This is a highly significant figure as contrasted with the 3.1 per cent reported by Michael above. Ellenberg[11] et al, in February, 1948, reported findings of 833 cases of amebiasis in Army personnel during the period of 1944 and 1945 which were treated in an Army General Hospital in Assam, India. Fletcher[13] et al, in 1946, reported a 33 per cent incidence in a study of Canadian ex-prisoners of war. Horster,[15], in 1945, reported an incidence of 25 per cent in the North-African-German forces.

The over-all incidence of amebiasis in the continental United States has been estimated as between 10 and 20 per cent by various authors.[6,12,14,23] In the midwestern states, amebiasis has not previously been considered as a major public health menace with the exception of the Chicago epidemic in 1933 and 1934. Approximately 1500 individuals allegedly were affected in the Chicago outbreak. Bundeson,[5] in 1934, reported a survey of 498 symptomatic patients seen during the Chicago outbreak and found 20 per cent to be infected. A survey of 364 food handlers during the same period revealed an incidence of 7.1 per cent. Summerlin,[27] in 1933, reported a survey of 1336 patients in Chicago with a 2.1 per cent incidence. Spector,[26] in 1937, surveyed 10,108 patients and found an incidence of 3.4 per cent for Endamoeba histolytica. Roadniche and Palmer[22] reported a survey of 2691 patients with an incidence of 1.8 per cent from the University of Chicago Hospital Clinics. Dolkart and Hedges,[10] in 1947, reported a survey of 3605 civilian cases in Chicago with the findings of 0.7 per cent in the asymptomatic group, and 3.5 per cent in the symptomatic group. We are unable to find any reports concerning the incidence of amebiasis in Michigan civilians. Kasper and Cope[16] in Detroit, Michigan, in 1946, examining 1155 specimens from 609 symptomatic patients referred by private doctors for stool examinations, found seventeen positive for endamoeba histolytica, an incidence of 2.5 per cent. During the same year 463 persons submitted specimens for routine food handlers examinations, and no cases were found. (The specimens obtained from food handlers were not received in the laboratory until from twelve to twenty-four hours after collection.)

Plan of Study

Due to the frequent findings of Endamoeba histolytica in the stools of veterans complaining of gastrointestinal symptoms by the Gastrointestinal Department of the Veterans Administration Regional Office, Detroit, a strict investigation was instituted on all patients referred to the department. In addition, all ex-prisoners of war and a large number of veterans complaining of recurrent attacks of malaria were included in the study. This latter group had been given adequate medical

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care and were continuing to have frequent recurrences of symptoms attributed to malaria two to three years after their departure from the endemic malarial areas.

Laboratory Technique

The following method was found to give the best results in our laboratories for detection of the trophozoites of Endamoeba histolytica as well as other parasites and ova:

The patient is given 2 ounces of a saturated solution of magnesium sulphate followed by two glasses of warm water, and he is encouraged to follow this with warm drinks such as coffee or soup until he feels he can obtain the required specimens. The stools are collected in 4-ounce waxed paper cups with lids, and the patient brings these specimens directly to the microscope where the technician is working. We examine six warm stools if obtainable. In the instance that the stools became too watery, we deviated from this regime and required fewer specimens, in no instance less than three. Direct examination is made immediately of flecks of blood or mucus on the stools using no diluent and normal saline only on the solid stools. This is followed by examination with D'Antoni's iodine or 1:1000 neutral red in saline to outline nuclear structure of the cysts. The neutral red is a vital stain while the iodine solution is not. Another vital stain, Quenzel's stain[28] is excellent. It produces the iron-hematoxylin effect without killing the trophozoites.

The first soft solid specimen is cultured for amebas and also concentrated by the zinc sulphate flotation method for parasites, ova and cysts. We use the Cleveland-Collier technique for culture and find it quite satisfactory. The base is a liver infusion agar brought out by Difco under the name of Endamoeba. This is prepared in slants and refrigerated until used. Immediately prior to use, the slants are covered with a 1:6 serum saline to which a pinch of rice powder is added. Horse serum or inactivated blood serum is used. Trophozoites of most protozoa developed readily in this medium, while E. coli and Giardia grew very poorly, if at all.

We have found it best to take two cultures on each case—one to be examined in twenty-four hours, and the other in forty-eight hours. A particle of feces about the size of a marble is emulsified in the floating serum saline and incubated at 37° Centigrade. After the incubation, the bottom of the slant is scraped lightly with a 1 c.c. pipette, and this material is scooped up and mounted on a warm slide. The slides are examined carefully under low power for the refractile trophozoites and, when suspected, further examined under high power. The amebas move rapidly and, since only an occasional one may be present, a thorough search is necessary. For the zinc sulphate flotation, a small particle is emulsified in zinc sulphate (with a specific gravity of 1.080) solution, and centrifuged rapidly for one minute. Contrary to common practice, we do not wash the feces, but add zinc sulphate to the very top of the tube and cover with a cover slip that contacts the liquid without overflowing. In one hour the cover slips are removed and mounted on a slide for investigation to determine the presence of cysts, ova and parasites. A concentration is also done using saturated solution of sodium chloride. As a rule two concentrations are done on each series.

Criteria of Diagnosis

We decided at the beginning of this study to establish definite rigid criteria to support the laboratory diagnosis of Endamoeba histolytica. This entailed visualization of actively motile trophozoites with progressive directional ameboid movement having well-formed finger-like pseudopodia, and containing red blood cells preferably. Concurrence by a member of the laboratory staff and one member of the Gastrointestinal Department on any stool specimen was mandatory during the initial six months of the survey. After this period the efficiency of the laboratory staff was considered adequate to accept the findings of any two technicians as diagnostic. In the early phase of this survey, the presence of large and small races of Endamoeba histolytica was noted and the similarity of this small race to E. nana may cause difficulty to the uninitiated laboratory technician. Diagnosis was not made on cyst study due to the lengthy procedure necessary for the staining of each specimen. The tremendous volume of laboratory work presented to our limited laboratory staff precluded the possibility of routine study with iron-hematoxylin. All cases in which cysts were found were considered suspicious and subsequently studied by culture and repeated examination. Dr. G. R. Callender, chief of the Laboratory Division of the Veterans Administration, Washington, D.

C., reviewed and approved these diagnostic criteria.

Findings

A routine careful history and a complete physical examination with particular reference to hepatomegaly, tenderness under the liver, tenderness in the lower abdomen, rectal examination and proctoscopic examinations were done in every case. These cases were grouped in the following categories:

1. Ex-prisoners of war of the Germans.
2. Ex-prisoners of war of the Japanese.
3. Asiatic-Pacific Theater, including Japan, Hawaii and the Philippine Islands, and all islands in the central and southwest Pacific.
4. China-Burma-India Theater.
5. European Theater of Operations, not including Italy.
6. European Theater of Operations, Mediterranean and the Middle East, including North Africa, Italy, Sicily and the Persian Gulf Area.
7. Caribbean, including Panama.
8. Greenland and Iceland.
9. United States only.
10. Theater unknown.

Table I lists a summary of our findings for these theaters. Nonpathogenic organisms such as E. coli, E. nana, I. butschlii, D. fragilis, Giardia lamblia, et cetera, are not tabulated.

This series includes a grand total of 1091 veterans examined from various theaters, as indicated in Table I. The over-all incidence of Endamoeba histolytica infestation was 28.3 per cent (309 cases). It is reasonable to assume that the actual number of veterans infected is higher than the figure of 28.3 per cent. Further investigation employing serial stool examinations with culture and fixed stain technique would undoubtedly uncover additional cases. In addition, a number of the negative group had been previously diagnosed and successfully treated as will be indicated in the breakdown of the individual theaters. Due to the limitations of the Outpatient Clinic, many of the veterans coming from several hundred miles distant, it was not feasible to hold many suspicious cases for repeated examinations.

TABLE I.

Theater	No. of Cases	E. hist.	Hookworm	Trichuria	Ascaris	Strongyloides	Others
Ex-German P. O. W.	227	83 (36%)	1 (0.4%)			1 (0.4%)	Salmonella (Derby) 1
Ex-Japanese P. O. W.	37	11 (29.7%)	6 (16.6%)	1 (2.7%)			
Asiatic-Pacific	446	122 (27.3%)	48 (10.8%)	8 (1.7%)	2 (0.4%)	2 (0.4%)	
C. B. I.	17	4 (23.5%)	1 (5.9%)				
E. T. O.	53	15 (28.3%)	1 (0.5%)	1 (0.5%)		1 (0.5%)	
E. T. O.-M. E.	174	50 (28.6%)	2 (1.2%)	1 (0.6%)	1 (0.6%)	1 (0.6%)	
U. S. A. Only	54	9 (16.6%)					Shigellal Taenia Sag 1
Caribbean	4	1 (25%)					
Greenland	2	1 (50%)					Hymenolepsis Nana 1
Asiatic-Pacific CBI	9	2 (22.2%)					
ETO-ME Pacific	14	2 (14.3%)	1 (7.1%)			2 (14.3%)	
ETO-ETO-ME	5	0	0	0	0	0	
Theater Unknown	49	9 (18.4%)	1 (0.5%)				
Totals	1091	309	61	11	3	7	4
Per Cent		(28.3%)	(5.6%)	(1%)	(0.3%)	(0.7%)	(0.4%)

We separated the prisoner of war group into those under the Japanese and German internment, and were surprised to note the high incidence of infection in the ex-prisoners of war of the Germans, who were held mainly within the borders of Germany, Poland and Austria. A large majority of these never had been previously diagnosed or treated, 20.5 per cent were asymptomatic, and many of the others had been previously diagnosed, in order of frequency, as follows: (1) psychoneurosis (many types with anxiety and gastrointestinal complaints), (2) residuals of malnutrition, (3) hepatitis, (4) chronic ulcerative colitis, (5) gastritis. Many had received treatment for these various complaints, which may very well have

TABLE II. EX-PRISONERS OF WAR OF GERMANS

227 CASES

	Number	Per Cent
E. Histolytica	83	36.6%
Strongyloides	1	0.4%
Hookworm	1	0.4%
Salmonella (Derby)	1	0.4%

been present in addition to amebiasis. We attempted to correlate these symptoms and findings in those diagnosed by us as amebiasis. An enlarged tender liver was encountered frequently. Transient mild episodes of diarrhea with intervals of constipation and a profusion of vague and mild abdominal pains, nausea, bloating, feeling of fullness after meals, and mild cramps were very frequent complaints. Very few of these patients were seriously ill. Most of the veterans were moderately underweight, had low exercise tolerances and a general feeling of lassitude. Only a few stated that they were in good health. Some of the symptoms may have been factors of emotional instability but subsequent successful antiamebic therapy resulted in a complete freedom from symptoms in a considerable number of these cases.

As can be seen in Table II, 36.6 per cent of all German prisoners of war were found to be infected with Endamoeba histolytica. The prisoners of war in Germany lived under very poor sanitary conditions. All of these prisoners gave typical histories during the periods of internment, which varied from seven days to seventeen months. They were placed on a starvation diet consisting of about a quarter of a pound of bread, two bowls of soup generally made of leafy vegetable, and one or two small potatoes as their daily meal. About once or twice weekly a small portion of meat or fish was included in the meal. The only variation in this menu was whatever food they could barter, steal or dig up in the fields. Diarrhea, starting early during the period of captivity and usually containing blood at one time or another, continued with various degrees of severity throughout the entire period. Many complained of night blindness, but none had clinical symptoms of beriberi or scurvy. Jaundice occured in a small percentage, the cause of which was undetermined. After liberation, a small number were hospitalized, but most of them were sent to embarkation camps in France and placed on a diet commensurate with their digestive abilities and their appetities. The majority of these men complained of flatulence, abdominal pains and inability to eat rich or greasy

TABLE III. EX-PRISONERS OF WAR OF GERMANS

83 CASES

Signs and Symptoms	Frequency of Presenting Signs and Symptoms Number	Per Cent
Diarrhea	38	45.8%
Abdominal Pains	29	34.9%
Dyspeptic Symptoms	18	21.5%
Asymptomatic	17	20.5%
Constipation	13	15.7%
Enlarged Liver	12	14.4%
Nausea and/or vomiting	11	13.3%
Malnutrition	7	8.4%
Anorexia	4	4.8%

foods. These symptoms were precipitated by quick resumption of a full diet and gradually disappeared. The weight loss varied between 25 and 100 pounds, and most of them regained their normal weight within three months after liberation. In those veterans in whom we diagnosed Endamoeba histolytica infestation, none had been previously diagnosed prior to their contact with the Veterans Administration Regional Office, Detroit. The clinical picture seen at the time of examination was one of abdominal complaints accompanied by diarrhea with intervals of constipation, inability to gain weight, loss of appetite and general feeling of lack of strength. Seventeen persons (20.5 per cent) did not exhibit any symptoms at the time of examination and may be classified as asymptomatic cases (Table III).

This presents a public health problem and invites the necessity for a more complete survey of all ex-prisoners of war of Germany throughout the country. Since the European Theater of Operations has never been considered an area of high epidemicity, the possibility of amebiasis has been given less serious consideration than the situation warrants.

TABLE IV. EX-PRISONERS OF WAR OF JAPANESE

36 CASES

	Number	Per Cent
E. Histolytica	11	29.7%
Hookworm	6	16.6%
Trichuria	1	2.7%

A total of thirty-six ex-prisoners of war of the Japanese were examined, and eleven (29.7 per cent) were found to harbor Endamoeba histolytica (Table IV). Six cases of hookworm and one case of trichuriasis were found. The ex-prisoners of war of the Japanese were interned for much longer periods than the German group and lived under much worse sanitary conditions in areas considered hyperendemic. These camps were located in Japan, China, Korea and the Philippine Islands. All of these veterans presented similar complaints.

TABLE V. ASIATIC—PACIFIC THEATER—446 CASES

	Number	Per Cent
E. Histolytica	122	27.3%
Hookworm	48	10.8%
Trichuria	8	1.7%
Ascaris	2	0.4%
Strongyloides	2	0.4%
Total of All Parasitic Infections	182	40.6%

Malnutrition, severe vitamin dificiency syndromes, severe bloody diarrhea, chronic severe malaria, and various types of skin infections were universally present during the period of captivity. Many also give histories of jaundice. Very inadequate medical attention was available to them. The diet consisted of polished rice, fish heads and rare scraps of meat and fish. It was grossly deficient in calories, minerals and vitamins. The average weight loss was estimated and varied between 50 and 100 pounds. The general complaints at the time of our examinations were similar to those of the ex-prisoners of war of the German group. Two cases had been previously diagnosed as amebiasis but were negative at the time of our examination. It was most surprising to find a lower percentage of amebiasis in this group than in the ex-prisoners of war of the German group. The most probable explanation is that the number of examinations in this group was small and, therefore, the figure of 29.7 per cent may not represent the true incidence.

The entire Pacific Theater has been notorious for its high endemic rates of infection with intestinal and other parasites. A large number of tropical diseases are always present in the native populations. Infections with Endamoeba histolytica and hookworm are especially common. Included in this geographical area are the southern and southwestern Pacific Islands, the Hawaiian Islands, Philippines, Japan and Korea. Four hundred and forty-six veterans who saw service in this area were examined; 122 (27.3 per cent) were found to harbor Endamoeba histolytica. Seventeen of them had other pathogenic organisms in the following combinations:

Endamoeba histolytica and Hookworm—16 cases.
Endamoeba histolytica and Trichuriasis—2 cases.
Endamoeba histolytica and Strongyloides—2 cases.
Endamoeba histolytica, Hookworm and Srongyloides—2 cases.

Hookworm infestation was found in forty-eight cases (10.3 per cent), nineteen of these infestations being in common with other parasites. In addition, thirty-three veterans gave previous histories indicating a positive diagnosis for Endamoeba histolytica during service, and eleven a positive diagnosis for hookworm. All were negative at the time of our examination.

As can be seen in Table V, 40.6 per cent (182 cases) had positive findings at the time of our examination. Adding the 10 per cent with previous diagnosis, it is evident that one of every two veterans serving in the Pacific Theater was or is infected by a pathogenic intestinal parasite. The absolute necessity of careful stool examination of all veterans who have served in this area is self-evident.

TABLE VI. ASIATIC—PACIFIC THEATER—122 CASES
FREQUENCY OF PRESENTING SIGNS AND SYMPTOMS

	Number	Per Cent
Diarrhea	53	43.4%
Constipation	12	9.8%
Abdominal Pains	34	27.8%
Dyspeptic Symptoms	9	7.4%
Nausea and/or Vomiting	6	4.9%
Enlarged Livers	19	15.5%

The incidence of signs and symptoms noted in Table VI is self-explanatory. It is essentially the same as in the preceding charts of the same type. In the group of cases that had negative stool findings, thirty were found to have enlarged livers. The cause of the hepatomegaly was undetermined. Further intensive investigation in this negative group is indicated.

TABLE VII. (ETO) EUROPEAN THEATER OF OPERATIONS—53 CASES

	Number	Per Cent
E. Histolytica	15	28.3%
Hookworm	1	0.5%
Trichuria	1	0.5%
Strongyloides	1	0.5%

The veterans listed in Table VII served within the continental limits of Europe and of the British Isles. With the exception of periods of combat, sanitary conditions were adequate. The group is small, but the figure of 28.3 per cent for Endamoeba histolytica infection is interesting.

TABLE VIII. (ETO) EUROPEAN THEATER OF OPERATIONS AND (ME) MIDDLE EAST
174 CASES

	Number	Per Cent
E. Histolytica	50	28.6%
Hookworm	2	1.2%
Trichuria	1	0.6%
Ascaris	1	0.6%
Strongyloides	1	0.6%
Hymenolepsis Nana	1	0.6%

The veterans listed in Table VIII were mainly the group which invaded Africa, Sicily, Italy, and then the Continent of Europe. Three cases had

previously been diagnosed as amebiasis but were negative in our laboratory. The figure 28.6 per cent is practically identical with that for the preceding European Theater of Operations Group.

TABLE IX. CONTINENTAL UNITED STATES ONLY
54 CASES

	Number	Per Cent
E. Histolytica	9	16.6%

The veterans indicated in Table IX practically all served in southern Army camps at one time or another. The usual complaints were those of chronic recurrent diarrhea with intervening periods of constipation. All were symptomatic at the time of examination. The figure of 16.6 per cent falls within the range of infection with Endamoeba histolytica which has been given by many observers for the United States.

TABLE X. MALARIA SURVEY—108 CASES

	Number	Per Cent
E. Histolytica	50	46.3%

One of us (A.A.T.) considered the possibility of amebiasis as a factor in those veterans complaining of recurrent malarial attacks. These patients (Table X) had contracted malaria in epidemic areas of the Asiatic and Pacific Theater, and the Mediterranean area, and were continuing to have frequent attacks two and three years after returning home. The average patient in this group reported from ten to forty clinical attacks of malaria, and had experienced two to ten attacks during the year previous to this investigation. The number of cases studied was 108. Of these, 46.3 per cent were found to be infected with Endamoeba histolytica. These observations indicate the probable importance of a complicating amebiasis, in cases of recurrent malaria. After treatment for amebiasis, the interval between attacks of malaria increased remarkably and in the vast majority attacks did not recur. In the infected group, two had enlarged spleens. In the negative stool group, ten had enlarged livers and six had enlarged spleens. Further investigation is indicated in this group.

Comment

X-ray studies were done almost routinely but rarely contributed any valuable information toward the diagnosis of amebiasis. Liver function tests seldom were of any help in the cases with hepatomegaly. Sigmoidoscopic examinations were done very frequently but were practically of no value in making the diagnosis. In this respect, nearly all of our cases were chronic and showed little abnormality in rectal mucosa. In only one case was the parasite demonstrated by sigmoidoscopic aspirations where the stool examination was negative. A properly done stool examination is the best method of making the diagnosis in our experience.

Our technique of stool examination was detailed under the laboratory technique. A few remarks at this point concerning the efficiency of stool examinations are in order. Andrews[3] stated in 1934 that stool examination after a saline purge is approximately 75 per cent efficient in the detection of Endamoeba histolytica. He feels that the use of six successive solid stool examinations is effective in the discovery of about 65 per cent of those actively infected. Sawitz and Faust[24] feel that it is necessary to examine at least five singly passed stools with iodine or hematoxylin stain, plus zinc sulphate flotation in order to provide a diagnostic efficiency of from 70 to 90 per cent. Sodeman,[25] from New Orleans, recently stated that, in his opinion, a purged specimen plus examination of material from the enema in preparation for proctoscopy, combined with aspirated material through the proctoscope is probably efficient in 80 to 90 per cent of cases. Almy[2] states that 30 to 50 per cent diagnostic efficiency with one method on one stool examination may be expected. Six successive examinations using all methods of diagnosis, in his opinion, should give 80 to 90 per cent diagnostic efficiency. Portis[21] feels that proctoscopic diagnosis is useless as a practical measure and that properly done repeated stool examinations will almost always produce the parasite. Tsuchyia[30] states that he finds a diagnosis efficiency of about 72 per cent for direct examination, 77 per cent for cysts, and 84 per cent for cultures on single examinations. Taubenhus[29] recommends routine proctoscopic aspiration for diagnosis. In our experience this is not necessary or practical. Craig[6] discusses culture diagnosis in his monograph. He states that the method of culture is not as important as the familiarity of the worker with any specific culture method. We have found our culture identification of Endamoeba histolytica parallels almost directly the positive direct examination results and is slightly more efficient. A single series of 200 cases were checked in the earlier portion of this study and thirty-nine Endamoeba histolyticas were found on direct examination. The culture method con-

firmed these, plus two additional cases which had been missed by the direct, making a total of forty-one cases against thirty-nine by direct in the check series. The method is simple and we feel that it should be used in every laboratory studying the incidence of Endamoeba histolytica. It should not replace the direct examination but should be used as a confirmatory diagnostic method.

The screening tests used for liver functions were:

1. Cephalin-cholesterol flocculation test (Hanger).
2. Icterus index.
3. Intravenous bromsulfalein retention test (5 milligram per kilo intravenously with a single determination at the end of forty-five minutes). Any retention of more than 10 per cent was considered pathological.
4. Urine urobilinogen determination quantitative.

If icterus was elevated a quantitative serum bilirubin determination was done. The liver function screen tests indicated liver damage in only two cases. This would indicate that the liver is not too seriously damaged, excluding the development of abscess.

Many of the cases had previously had stool examinations in the Army and other medical institutions that were reported as negative. On close questioning, it was obvious that the vast majority of these examinations had been done on old unpurged stools and, therefore, the possibility of finding the trophozoite of Endamoeba histolytica was almost nil. Single stool specimens without concentration and/or culture techniques have been proved to be a poor method of diagnosis. In our experience, most of the positive findings were noted between the second and the fourth stool specimens submitted. The first soft mushy stool was the best for diagnosis. The selection of a fleck of bloody mucus offered the best diagnostic possibility. The skill and experience of the technicians was paramount in this respect.

Unfortunately, amebiasis is not considered sufficiently as a cause of gastrointestinal disease in areas of low epidemicity. The figures given as representative of infestation in the continental United States include averages of high incidence in the southern states where amebiasis is a frequent condition. Consequently, the practitioners in these areas have developed a suspicious attitude toward the presence of amebiasis in patients presenting obscure gastrointestinal complaints. However, in the midwestern states, consciousness of the presence of this parasite is at a much lower ebb.

Treatment

All of the veterans with amebiasis were given a standard course of therapy as follows:

1. Diodoquin (Searle), 0.63 of a gram three times a day for twenty days.
2. Carbarsone (Lilly), 0.25 of a gram twice daily for the following ten days.

The veterans were then instructed to return for check stool examinations every two months for six examinations.

The effectiveness of therapy is controversial. Lamb and Royston[17] reported a 91 per cent recurrence rate after nine weeks following a course of therapy. Almy[2] reports a cure in 85 per cent after one course of therapy. D'Antoni[8] reports eighty-one of eighty-four cases cured with Diodoquin.

At the present writing we have found twelve patients still infected with Endamoeba histolytica after one course of therapy. Reports will be made in the near future as to the efficiency of our outlined plan of therapy. We have not used any emetine on these ambulant patients and feel that emetine is contraindicated unless the patient is confined to bed under strict medical supervision. Those cases presenting acute symptoms and those cases failing to respond to therapy have been hospitalized and emetine treated. Albright and Gordon[1] feel that emetine is indicated in the treatment of all cases. However, for practical reasons we have been confined to the use of oral therapy only. It would be obviously impractical to hospitalize the entire 714 cases of Endamoeba histolytica that we have diagnosed in the last twenty-four months.

It is not usually appreciated that amebiasis is also an occupational disease. Since starting this investigation, three of our own laboratory technicians have developed symptoms and were found to be infected with Endamoeba histolytica. The importance of finger-to-mouth contamination is further emphasized by numerous instances which have come to our attention recently where the families of involved veterans have become infected with Endamoeba histolytica. In one instance, the Detroit Health Department found that the wife and four children had stools positive for Endamoeba histolytica.

Summary

This series was compiled between June 1, 1947, and July 1, 1948.

1. Of 1,091 veterans from the State of Michigan examined, 309 (28.3 per cent) were found infected with Endamoeba histolytica.

2. The incidence of Endamoeba histolytica in ex-prisoners of war is high.

3. There is no significant variation in the infection rate with Endamoeba histolytica between the Theaters of War.

4. Chronic amebiasis should be considered in cases diagnosed as chronic recurrent malaria.

5. More adequate training of laboratory technicians is advised in the technique of stool examination.

6. The frequency of amebiasis in overseas returnees as a group presents a serious public health problem.

7. Medical centers serving veterans should establish proper diagnostic facilities for stool examinations.

Addenda

From July 1, 1948, to January 1, 1949, an additional 950 veterans were seen and 203 new cases of amebiasis found. The percentage of infection in this group was 21.4 per cent. The total number in the period from June 1, 1947, to January 1, 1949, is 512 cases with Endamoeba histolytica infection.

From January 1, 1949, to June 1, 1949, 1,110 more veterans were examined and 202 new cases of amebiasis found. The percentage of infection was 26.8 per cent. The total number of cases to date is now 714 cases.

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MSMS

TEN TOP SCIENCE ADVANCES

The ten most important science advances made during 1949, as picked by Watson Davis, director of Science Service, are:

1. Atomic explosion in Russia.

2. Hormones, cortisone and ACTH brought dramatic relief to sufferers from arthritis and promise to be useful in muscle weakness, kinds of cancer, aging disabilities and even mental illnesses.

3. Use of anti-allergy drugs to relieve the symptoms of colds.

4. Demonstration that dramamine relieves air and sea sickness and other nausea.

5. Non-stop round-the-world flight of Army bomber in ninety-four hours.

6. Development of guided missiles, although details are still secret.

7. Commercial synthesis of chloromycetin, antibiotic for disease-fighting, first chemical manufacture of such material.

8. Discovery of Stone Age man in Alaska, giving man a greater antiquity in America.

9. Development of fluorocarbons as a new and promising class of chemicals, useful particularly as lubricants.

10. Discovery that lenses transmitting infra-red (heat) can be made from germanium metal opaque to ordinary light.

—*Science News Letter,* December 24, 1949

Psittacosis Treated with Penicillin and Chloromycetin

By I. Donald Fagin, M.D., and
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Detroit, Michigan

MRS. N. G., a forty-nine-year-old white housewife, was admitted to the Mount Carmel Mercy Hospital on April 22, 1949, complaining of headache, fever, and malaise of four days' duration.

The past medical history included diabetes mellitus of moderate severity for at least two and one-half years with fairly good control under treatment with diet and insulin (30 to 40 units of a 2:1 regular and protamine zinc insulin mixture daily). In addition, the patient had suffered from frequent migraine-like headaches for over twenty years, the onset dating from a mild head injury associated with severe psychic trauma.

The present illness began on April 16, 1949, with a sore throat, slight fever, and malaise. These symptoms subsided by the next day, and the patient remained fairly well until April 19, when she developed a severe constant headache at the vertex, followed by feverish sensations, malaise, and prostration, all of which persisted to the time of admission to the hospital. On April 21, she was seen by one of us (J.N.M.), and 600,000 units of repository penicillin was administered intramuscularly. At that time, physical examination revealed no abnormalities other than an injected posterior pharynx. On the following day (April 22), 4-plus glycosuria and acetonuria were found. Intensive insulin administration was begun, another 600,000 units of repository penicillin was injected, and the patient was transferred to the hospital. There had been no cough or dyspnea or any other systemic complaints other than the headache.

Physical examination on admission to the hospital revealed an acutely ill, febrile, somnolent, somewhat confused, middle-aged white woman complaining of excruciating headache, aggravated by sitting up in bed. The mucous membrane of the pharynx was injected. Slight nuchal rigidity was evident, but Kernig's and Brudzinski's signs were absent. Fine dry râles were audible at the right base posteriorly over an area about 4 cm. in diameter, with questionable slight impairment of resonance in the same area, but with no change in breath or voice sounds. A faint erythematous eruption, consisting of oval macules measuring about 4 mm. in long diameter, was present over the abdomen, chest, back and arms; the macules faded on pressure. Examination was otherwise not remarkable.

Admission laboratory studies revealed glycosuria, acetonuria, slight albuminuria, hyperglycemia (blood sugar, 268 mg. per cent), and acidosis (CO_2 combining-power, 19 vols. per cent). The red blood cell count was 4.72 million per cu. mm., the hemoglobin content was 15.0 gm. per 100 c.c., and the white cell count was 5,300 per cu. mm., with 86 per cent polymorphonuclear leukocytes (including 32 per cent stab cells), 12 per cent lymphocytes, and 2 per cent monocytes. A lumbar puncture performed on the following day revealed no abnormalities in the cerebrospinal fluid.

Initial diagnostic impressions, in addition to the obvious diabetic acidosis, included the possibilities of atypical pneumonia, meningococcemia, and endemic typhus. On the day following admission, in response to a query posed by a dermatologist (Dr. I. Botvinick) casually visiting the hospital with us, the patient stated that she had a parakeet at home. The bird had been in her possession for two years, and had exhibited no signs of illness; nevertheless, this introduced the possibility of psittacosis.

The hospital course is summarized in the accompanying figure. On admission, 200,000 units of aqueous penicillin were administered. The usual treatment for diabetic acidosis was instituted, including insulin, intravenous administration of normal saline and 1/6 molar sodium lactate solutions, with rapid alleviation of the acidosis. The diabetic state of the patient did not constitute a major problem during the rest of her hospital stay.

Penicillin was continued in dosages of 400,000 units twice daily in combinations of rapidly absorbable and repository forms. The blood pressure, which had been 140/82 on admission, fell to 90/60 by the following morning, and then rose to normal levels (112/70) that evening. The temperature, which had been 103.4° F. on admission, dropped sharply the next day to 99.2° F., and then rose just as sharply to 105° F. The patient appeared critically ill, and we elected to try choloromycetin in addition to penicillin on the assumption that we were dealing with a disease due to virus (psittacosis or atypical pneumonia) or to rickettsia (typhus). At this time, 2.2 million units of penicillin had been administered during the preceding sixty hours without any apparent improvement. Accordingly, 3 gm. of chloromycetin were administered orally as an initial dose, followed by 0.5 gm. every four hours.

Within forty-eight hours following the start of chloromycetin therapy, the patient's temperature began to fall and her clinical appearance improved markedly. With the defervescence of the fever, the patient's clinical course was rapidly uphill, being complicated only by nausea and vomiting due to the chloromycetin, and urinary retention requiring frequent catheterization from the fourth to the sixth hospital days.

The rash began to fade on the fourth hospital day and disappeared on the fifth. The headache began to subside on the fifth hospital day. The râles at the right lung base persisted until the eighth day and then disappeared. X-ray examinations of the chest on the second and fourth hospital days revealed some intensification of the bronchovascular markings but no areas of infiltration or consolidation in either lung field, and were considered by the roentgenologist (Dr. J. M. Grace) as negative for evidence of active pathology.

The dosage of penicillin was halved on the fifth hospital day, and on the following day the dosage of chloromycetin was decreased to 2 gm. in twenty-four hours. Both drugs were discontinued on the seventh

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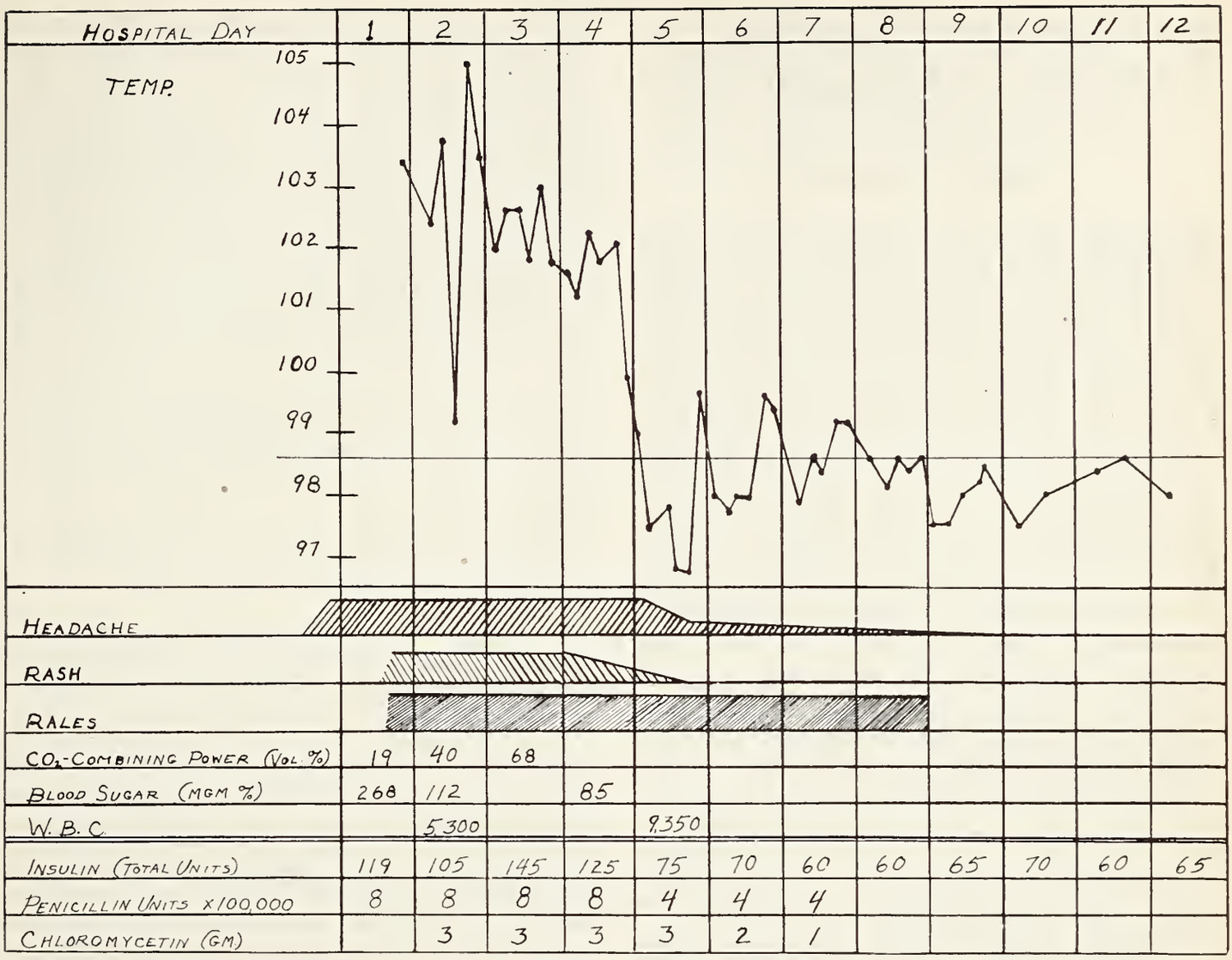

Fig. 1. Graphic summary of hospital course.

hospital day, after the patient had received a total of 5 million units of penicillin and 15 gm. of chloromycetin, a small amount of the latter having been lost by vomiting. Nausea and vomiting subsided promptly with the cessation of chloromycetin therapy. The patient was discharged from the hospital on May 3, 1949, twelve days after admission.

In addition to insulin, penicillin, chloromycetin, intravenous fluids, and a diabetic diet (C 150, P 100, F 70), the medication administered included sedatives, analgesics, and vitamin supplements. Iron in the form of ferrous sulfate was administered when a repeat blood count on April 26 revealed evidence of secondary anemia (hemoglobin, 10.2 gm. per 100 c.c.; red cell count, 3.62 million per cu. mm.; white cell count, 9,350, with a normal differential). Mandelamine was administered to combat bacilluria which developed during the period when repeated catheterizations were necessary.

Additional laboratory procedures included blood cultures on April 22 and 23, with penicillinase added to the culture media, spinal fluid culture, and urine culture, all of which yielded no growth. Agglutination tests with typhoid and paratyphoid bacilli, Brucella abortus, and proteus Ox19 yielded no significant titres.

Through the courtesy of Dr. K. F. Meyer of the Hooper Foundation in San Francisco, complement fixation tests against psittacosis antigen were performed with the patient's blood serum with the following results:

Dilution	*April 24, 1949*	*May 16, 1949*
1:16	4+	
1:32	2+	
1:64	1+	
1:128	0	4+
1:256		1+

According to Dr. Meyer, this eightfold rise in titres is diagnostic for an infection due to the viral agent of the psittacosis group, if lymphogranuloma has been ruled out.

The patient's parakeet was given to a local veterinarian, and it died within a few days after her discharge from the hospital. The body was disposed of before local health authorities were able to obtain it.

Summary

The record of a patient with psittacosis complicated by diabetic acidosis and treated with penicillin and chloromycetin with happy results is reported. There was no roentgenologic evidence of pneumonia, but clinical signs of pneumonitis were

(Continued on Page 213)

Atropine Toxicity in the Treatment of Schizophrenia

By Gordon R. Forrer, M.D.
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FIFTEEN SCHIZOPHRENIC patients were administered 20 to 60 milligrams of atropine sulfate by intermuscular injections, three times a week for four to ten weeks. All were chronic cases, most having been institutionalized for a period of years and presenting problems of custodial care.

The pharmacological effects of atropine sulfate are due to its blocking of cholinergic impulses. Overactivity of the sympathoadrenal system is simulated because normal adrenergic impulses dominate following the block of cholinergic nerves. The essential factor is a block of acetylcholine utilization. Peripherally, there is mydriasis and cycloplegia, inhibition of respiratory secretions, relaxation of the peribronchiolar musculature, cardiac acceleration, decrease in tone and peristalsis, increase of sphincter tone in the gastrointestinal tract, and inhibition of sweating.

In toxic doses atropine sulfate is delirifacient. The mechanism is not known, but observations suggest that the interference of utilization of acetylcholine in the central nervous system may be involved. The evidence for the role of a chemical mediator in central transmission is yet meager. Mann, Tennenbaum and Quastel[4] have shown that nervous tissue alone is capable of synthesizing acetylcholine *in vitro*. Chute, Feldberg and Smyth[1] observed that acetylcholine, in significant amounts, was released into the perfusion fluid flowing through the isolated cat's brain.

The effectiveness of insulin in the treatment of schizophrenia has been thought due, in part, to autonomic changes. Gellhorn[2] believes that the hypoglycemia of insulin leads to a general decrease in cortical activity and causes an increased excitability of sympathetic centers and a sympathetico-adrenal discharge.

Parker[7] believes that the essential nature of the insulin effect is an oscillation between predominance of the sympathetic and parasympathetic tone. He thinks there is first a parasympathetic stage, then a sympathetic, and finally a parasympathetic one until the end of coma. He feels that all the diversity of opinion on the actual effect of insulin on the autonomic nervous system is actually due to this oscillation. He states that either the autonomic functions are essentially unrelated to the cure or that one side of the autonomic nervous system may be depressed in schizophrenia and is restored by stimulation of insulin on both sides. Muller[6] believes insulin produces vagotonic blocking of nerve pathways phylogenetically older which had been given up normally but were activated again in the disease process. He feels that insulin blocks these paths, and thus nerve cells get a chance to get started again. Meduna[5] feels that in insulin therapy at least part of the benefit is accounted for by a shift in equilibrium from the vago-insulin to the sympathetico-adrenal system.

Hoskins[3] feels that schizophrenic patients show a sluggishness in sympathetic responsivity.

It will be observed that atropine, because of its blocking effect on acetylcholine, produces autonomic changes similar to those found during insulin therapy.

Statistical analysis is not possible in this small group of patients. No special preparation of patients was carried out. With one exception, no psychotherapy was attempted. A solution of atropine sulfate containing four milligrams per c.c. was prepared. Thirty-two milligrams was found as effective as much larger doses. Urinalysis, blood sugar, nonprotein nitrogen, white blood cell count, and cephalin-cholesterol flocculation tests were obtained weekly. No significant alterations were noted except the cephalin-cholesterol flocculation test which showed 3-plus to 4-plus occasionally. Electrocardiograms obtained on seven patients, at the height of toxicity, indicated no significant abnormalities. Hyperthermia was encountered twice and responded to alcohol sponges. Extreme excitement occurred once and required sodium amytal for sedation. Oral hygiene was cared for with mouth washes and glycerin. Occasional mild conjunctivitis responded to boric acid eye wash. Blood pressure, pulse, and respirations were recorded every hour. A rise in blood pressure and pulse was consistently found during the first two hours and gradually returned to normal in the succeeding six hours.

In general, there is a period of mild excitement beginning one half to three quarters of an hour following administration of the drug. Dilatation of the pupils, flushing, and dry mouth are noted approximately thirty minutes following administra-

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tion. Occasionally a paradoxical reaction is noted, the patient becoming pale rather than flushed. This is followed by a period of confusion, restlessness, and attempts to get out of bed which lasts for about an hour. There follows a period of semi-coma with occasional outbursts of restlessness, lasting for a variable period, but usually for four to six hours. Confusion, ataxia, and urinary frequency are prominent. The recovery period begins about six hours following administration of the drug. It is characterized by confusion and restlessness.

No special nursing care was used. Patients were not fed the noon meal on treatment days. Slight weight loss was noted in most patients. Extra nourishment was given on non-treatment days.

The following cases show the results achieved to date:

Case 1.—P. L., aged thirty-nine. Continuously hospitalized for sixteen years. Schizophrenia, hebephrenic type. Inaccessible, manneristic, resistive, incontinent, destroying clothing. Received thirty treatments varying between 20 and 60 mg. of atropine sulfate. Results: Tidy, more co-operative and active, now dressed and not destroying clothing. Experienced one lucid period of three hours duration after twenty-seventh treatment.

Case 2.—J. K., aged twenty-eight. Continuously hospitalized for six years. Schizophrenia, catatonic type. Had previous shock therapy with short remissions. Inaccessible, cerea flexibilitas, untidy, ate poorly. Received thirty treatments varying between 20 and 40 mg. atropine sulfate. Results: More active, co-operative, eats well, tidy, hallucinated, occasionally accessible.

Case 3.—S. C., aged thirty-three. Continuously hospitalized for ten years. Schizophrenia, catatonic type. No previous shock therapy. Withdrawn, inaccessible, resistive, indifferent. Received thirty treatments. Dose varied between 20 and 60 mg. of atropine sulfate. Result: More active and less resistive, but remains inaccessible. Blocking predominant.

Case 4.—R. W., aged thirty-one. Continuously hospitalized for fourteen years. Schizophrenia, hebephrenic type, mentally deficient. Manneristic, untidy, irritable, inaccessible. Received thirty treatments. Dose varied between 20 and 48 mg. of atropine sulfate. Result: No demonstrable change.

Case 5.—C. P. Continuously hospitalized for six months. Schizophrenia, paranoid type. Autistic, delusional, hallucinated. Received electro-shock therapy without change. Received thirty treatments of atropine sulfate. Dose varied between 20 and 36 mg. Results: No longer delusional. Affect good. Has returned to pre-psychotic level of adjustment.

Case 6.—H. R., aged forty-two. Continuously hospitalized for twenty-two years. Schizophrenia, catatonic type. Inaccessible, manneristic, resistive, incontinent, destructive of clothing. No previous shock therapy. Received thirty treatments. Dose varied between 20 and 60 mg. of atropine sulfate. Results: Continues manneristic; no longer incontinent or destructive; co-operative and more active.

Case 7.—D. H., aged forty-three. Continuously hospitalized for ten years. Schizophrenia, hebephrenic type. Destructive of clothing, inaccessible, manneristic, uncooperative. Previous electro-shock therapy without results. Received thirty treatments of atropine sulfate. Dose varied between 20 and 60 mg. Results: Tidy, co-operative, active, carries out assignments in kitchen.

Case 8.—J. P., aged twenty-three. Overtly psychotic for one year. Schizophrenia, paranoid type. Delusional, paranoid, hallucinated. No previous electro-shock therapy. Received twenty treatments. Dose varied between 20 and 24 mg. Considerable psychotherapy. Results: Progressive improvement with transference to physician and beginning insight into psychosexual conflict.

Case 9.—R. F., aged twenty-three. Hospitalized for five years. Schizophrenia, hebephrenic type. Ate poorly, inaccessible, denudative, grimacing. Received metrazol and electro-shock therapy resulting in patient becoming worse. Received twelve treatments. Dose varied between 20 and 40 mg. of atropine sulfate. Results: Eats well, co-operative, remains inaccessible, no longer denudative.

Case 10.—W. H., aged twenty-five. Continuously hospitalized for two years. Schizophrenia, hebephrenic type. Circumstantial, hallucinated, delusional, co-operative. No previous electro-shock therapy. Received twelve treatments. Dose varied between 20 and 40 mg. of atropine sulfate. Results: Slightly better contact.

Case 11.—B. V., aged thirty-one. Hospitalized three years. Schizophrenia, catatonic type. Mute, hyperactive, hallucinated. Received electro-shock therapy with some improvement. Received twelve treatments. Dose varied between 20 and 32 mg. of atropine sulfate. Results: More accessible, much less hyperactive and disturbed.

Case 12.—E. H., aged twenty-eight. Hospitalized ten months. Schizophrenia, paranoid. Delusional, suspicious, withdrawn, and electro-shock therapy ineffective. Received twelve treatments. Dose varied between 20 and 40 mg. of atropine sulfate. Results: Delusions less firmly fixed. Remains suspicious. No essential change.

Case 13.—H. M., aged twenty-six. Hospitalized sixteen months. Schizophrenia, paranoid type. Hallucinated, withdrawn preoccupied. Previous electro-shock therapy produced slight improvement. Received twelve treatments. Dose varied between 20 and 32 mg. of atropine sulfate. Results: More accessible and co-operative. Hallucinations have decreased in frequency.

Case 14.—R. S., aged nineteen. Hospitalized two months. Schizophrenia, paranoid type. Delusional, withdrawn, autistic. No previous electro-shock therapy. Re-

(Continued on Page 193)

Deep Infections of the Neck

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OCCASIONALLY the physician who treats infections of the ear, nose, throat, and mouth encounters a very virulent type of infection which spreads from its original site, rapidly descending into the neck, and in a short period of time seriously threatens the life of the patient. By understanding the type of infection with which he is dealing and the location from which it originated, the surgeon should be able to trace its course as it invades the neck. This requires a thorough knowledge of the fascial planes which tend to create potential spaces or pathways from the ear, nose, throat, and mouth into the neck.

The fascial planes of the neck consist of the superficial and the deep portions. The superficial fascia lies immediately beneath the skin, being made up of connective tissue with fatty deposits. The deep cervical fascia is a better defined structure composed of a waxy matrix of fibrous and fatty fibroareolar connective tissue, forming sheets or bands of tissue. This tissue covers and encloses all the structures of the neck, holding them in their relative positions. It forms an investing collar lying beneath the skin, superficial fascia, external jugular veins and platysma muscles. It is attached above to the occipital bone, mastoid process and lower border of the mandible and below to the manubrium sterni, clavicle and acromion process, while posteriorly it is attached to the spinous processes of the cervical vertebra. This fascia may be considered as originating from the carotid sheath fascia which envelops the carotid arteries, internal jugular vein and the vagus nerve. Internally it is in relation with the prevertebral fascia which covers the spinal column with its muscles, while externally it gives off the superficial or splitting layer of the deep fascia which covers the muscles, blood vessels, nerves, salivary glands and other structures. The visceral portion of the deep fascia has two portions, the buccopharyngeal, covering the constrictor muscles of the pharynx and buccinator muscle above and the pretracheal portion which envelops the trachea, esophagus and thyroid glands below.

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The muscles of the floor of the mouth and the walls of the pharynx form the first barrier to prevent infections from spreading into the neck from the pharynx and oral cavity. The floor of the mouth is primarily made up of the mylohyoid muscles which form a muscular diaphram from the inner surface of the mandible from the angle of the jaw to the mid-line where they unite and below to the upper border of the hyoid bone. The hyoglossal muscles are just behind the posterior extension of the mylohyoid muscles and extend from the tongue to the hyoid bone. Behind the hyoglossal muscles the lateral walls of the pharynx are made up for the most part by the middle constrictor muscle which is attached to the median raphe posteriorly and extends fan-shaped anteriorly, attaching to the styloid process and the hyoid bone. This muscle is supported above by the superior constrictor and below by the interior constrictor muscles. Between the posterior border of the mylohyoid muscle and the hyoglossal muscle is a cleft which is called the submaxillary fossa. This fossa is occupied by the submaxillary gland. The superficial portion of this gland lies externally upon the mylohyoid muscle and rests on the digastric muscle below, while its deep portion is wedged between the mylohyoid and hyoglossal muscles and extends into the floor of the mouth. It is through this area that the branches of the external maxillary and lingual arteries and veins pass as well as lymphatics. This cleft or so-called submaxillary fossa represents a weak area in the floor of the mouth and is one of the pathways by which infections descend into the neck. This fossa is separated from the pharyngomaxillary and parotid spaces by a band of deep cervical fascia, which forms the powerful stylomastoid ligament. This ligament tends to prevent infections in the submaxillary fossa from spreading posteriorly into the carotid sheath area.

Infections of the Submaxillary Fossa

The two most serious infections which spread into the neck by way of the submaxillary fossa are Ludwig's angina and submaxillary space abscesses. These conditions usually originate from infections involving the teeth, submaxillary gland or injuries or ulcerations of the floor of the mouth. Bacteriologically they are mixed types, including many forms of the streptococcus, along with the staphylococcus, Vincent's bacillus, pneumococcus and gas bacillus.

Ludwig's angina is a rapidly spreading cellulitis usually beginning in the sublingual region and invading the neck through the submaxillary fossa. It is a perilymphatic infection, primarily involving the cellular tissue. Because of the virulence of the infection and the anatomical location which it occupies, the symptoms are often alarming and the patient's life may be threatened in a few days after its onset. The tongue may be pushed upward and forward and may protrude from the mouth due to the accumulation of the inflammatory products in the floor of the mouth and the patient may be unable to close his mouth. Very rapidly there is a hard induration of the neck first appearing in the region of the submaxillary fossa on one or both sides and later it may involve the entire submental region. This induration is board-like, there may be slight pitting or blanching upon pressure, but there is no evidence of softening or fluctuation. It is due to a rapidly spreading cellulitis or phlegmon which is occurring beneath the investing collar of the deep cervical fascia.

The treatment of Ludwig's angina has been greatly altered since the advent of the sulfonamides, penicillin and streptomycin. When these drugs have been administered early and in massive doses, surgical intervention may be averted. However, if not controlled medically it may be necessary to operate; the fundamental principle of the surgery is primarily to decompress the area to relieve the tension on the underlying structures and secondarily to drain pus. In most cases no pus will be obtained. The incision necessary to decompress the area must be a large one and that advocated is made well below and parallel to the mandible from the angle of the jaw to the mid-line; if both sides are involved a like incision is made on the opposite side along with an additional vertical incision from the mandible to the hyoid bone in the mid-line. These incisions are made through all of the structures of the neck, dividing the mylohyoid and genioglossal muscles, and to the mucous membrane of the floor of the mouth. Intra-oral incisions are inadequate as they do not give the necessary decompression. Tracheotomy may be necessary in some cases.

Submaxillary abscesses are a milder and a less dangerous type of infection. These usually primarily involve the lymph structures which hold them in abeyance. They may later break down into suppuration. These conditions are often erroneously called Ludwig's angina; however, in the latter condition a typical cellulitis is present and pus is not found except occasionally in a few isolated areas. The submaxillary abscess is easily dealt with by simple surgical drainage.

Masticator Space Infections

The masticator space has been described by Hall and Morris as a fascial sling containing the muscles of mastication and ramus of the mandible. This fascial space is formed by the deep cervical fascia which splits as it attaches to the lower border of the mandible, the outer sheath covering the mandible, masseter and temporal muscles, and the inner sheath covering the internal surface of the mandible and the pterygoid muscles.

Infections of this space are practically all dental in origin. They follow extractions, curettement of tooth sockets, or injections of the inferior alveolar nerve for local anesthesia.

Symptoms of infections of this space may predominate either on the internal or external surface of the mandible. If the internal symptoms predominate, it may have the appearance of a peritonsillar abscess pointing at the lower pole of the tonsil; this is practically never seen in infections of tonsillar origin. The swelling and induration occurs between the last molar tooth and the anterior tonsillar pillar and may extend along the internal surface of the mandible near the angle. If external symptoms predominate, the swelling will be at the angle and along the ramus of the mandible. These clinical pictures are accompanied by marked trismus, dysphagia, fever and signs of toxemia.

The medical treatment consists of chemotherapy, hot saline mouth washes and application of ice compresses externally.

The surgical drainage depends upon the location of the suppuration.

1. Internally an incision is made down to the bone on the inner surface of the mandible and a curved hemostat is introduced into the masticator space behind the angle of the jaw.
2. External incision down to the mandible near the angle of the mandible.
3. Temporal incision is made if the infection has ascended up the ramus of the mandible.

The Pharyngomaxillary Space

This is a potential space and is also called the lateral pharyngeal, parapharyngeal, or pharyngopterygoid space and was originally described by Mosher. It extends from the base of the skull above

in the region of the foramen jugular and lacerum to about the level of the hyoid bone below. It is bounded by the constrictor muscles of the pharynx internally, and the ramus of the mandible, internal pterygoid muscle and parotid gland externally. It is in relationship with the parotid fossa externally and the submaxillary fossa below. This space is also partially divided into an anterior and posterior compartment by styloid process and its muscles, as described by Beck. The anterior compartment contains chiefly lymph nodes, the ascending pharyngeal and external maxillary arteries and cellular tissue. The posterior compartment contains the more vital structures with the internal carotid artery, internal jugular vein, and vagus nerve, within the carotid sheath, along with the glossopharyngeal, hypoglossal, spinal accessory nerve and the cervical sympathetic trunk.

Infections of the Pharyngomaxillary Space

Etiology

1. Tonsillar and peritonsillar infections are the most common cause of involvements of this space. The tonsil is separated from this space by the constrictor muscles and buccopharyngeal fascia, and there is free lymph drainage into this space from the tonsil. Infections may also be carried into this area by the injection of local anesthesia preparatory to performing a tonsillectomy or removal of the last molar tooth.
2. Parotid gland infections may invade the pharyngomaxillary space by extending through the weak internal wall of the parotid fascia, which is in direct relationship with this space.
3. Mastoid infections may extend to this space. Bezold abscesses rupturing on the inner surface of the tip may extend down the posterior belly of the digastric muscle, which passes directly through this space. Mastoid infections involving the petrous tip and cells deep to the temporomandibular articulation may invade the pharyngomaxillary fossa by erroding the inferior surface of the temporal bone.
4. Extension of retropharyngeal infections to the pharyngomaxillary space may occur as these spaces are separated only by a thin layer of alar fascia.
5. Deep cervical lymph glands which are located in the anterior portion of this space may undergo suppuration and break down.
6. Thrombophlebitis of the tonsillar, pharyngeal or lingual veins can occur.
7. Infections originating in the tongue, mandible, or the floor of the mouth may spread to the space by extending along the muscles attached to the styloid process.

The general symptoms of pharyngomaxillary space infections may vary somewhat according to the origin of the condition. However, there is usually a history of tonsillar, pharyngeal, dental or parotid gland infection which was followed by a swelling of the lateral wall of the pharynx internally which pushes the tonsil, uvula and soft palate toward the opposite side. External swelling is noted at the angle of the mandible, anterior to the sternocleidomastoid muscle and over the parotid gland. These findings are accompanied by trismus, dysphagia, and sometimes dyspnea. The above picture may also be accompanied by chills and fever giving evidence of a septicemia.

The clinical picture varies somewhat in cases in which only one of the compartments is involved, as described by Beck.

If the anterior portion is the one primarily involved, the tonsil and pharyngeal wall anteriorly will be pushed toward the mid-line; however, the lateral pharyngeal wall behind to the posterior tonsillar pillar does not protrude to any great degree. There is marked trismus and extreme pain due to the accumulation of infectious products between the constrictor muscles and the internal pterygoid muscles. External swelling is seen over the parotid and at the angle of the mandible anterior to the sternocleidomastoid muscle. The patient may be very uncomfortable, but his general condition is good; usually there is no evidence of septicemia because the infection does not directly involve the great blood vessels of the neck.

If the posterior compartment is primarily involved, the patient will appear sick, although he does not have the pain and discomfort that is seen in the anterior type of infection. There is little or no trismus and no marked protrusion of the tonsil toward the mid-line. The external swelling may be less, but there is a swelling of the lateral pharyngeal wall behind the posterior tonsillar pillar. The suppuration is in direct relationship with the internal jugular vein and internal carotid artery and because of this there is evidence of sepsis and generally the patient is very sick.

Occasionally the entire pharyngomaxillary space is invaded by a very virulent type of infection which involves primarily the cellular structures, giving the picture of a rapidly spreading cellulitis, as seen in Ludwig's angina. There is a diffused swelling of all the lateral wall of the pharynx internally, and externally there is a hard induration beginning at the angle of the mandible. This edema rapidly extends to the parotid area and the eye of the affected side above, while below the induration invades the neck, as seen in Ludwig's angina. The patient is extremely septic and his

life is immediately threatened, principally by laryngeal edema early in the course of the infection.

The treatment of the above conditions vary somewhat with each type and their response to chemotherapy. In general, if pus is present it must be drained. This fossa is more safely exposed by the external approach, as described by Mosher. The internal surgical approach is rarely advisable because of the danger of massive hemorrhage which could not be controlled.

The prognosis in infections of the pharyngomaxillary space may be good in cases where a large abscess is found and surgically drained, but is not so good in cases in which there is a cellulitis with no evidence of localization.

Infections of the Parotid Fossa

The parotid fossa contains the parotid gland. The fascia covering the external surface of this gland is made up of the superficial layer of the deep cervical fascia and it is extremely thick and tough. Septi of this fascia extend into the parotid gland structure dividing it into lobules. The fascia covering the gland internally is extremely thin and weak where it is in direct relationship with the carotid sheath and the pharyngomaxillary space and also posteriorly where it is in contact with the middle and external ear.

Suppurations in the parotid gland and fossa may occur from:

1. Retrograde infections from Stenson's duct or calculi in the duct or the gland itself.

2. Ear infections—furunculosis of the external canal or infections of the middle ear may extend through petro-tympanic fissure or at the injunction of the cartilaginous tragus with the bony canal directly into the parotid gland.

3. Dental infections may extend up the ramus of the mandible and invade this space.

4. Other causes of parotid gland and space abscesses are external injuries, following acute infections or debilitating diseases or following surgical operations.

Symptoms of parotid space infection consist of a hard smooth swelling over the parotid area in front of and below the auricle which becomes more intense. This swelling may extend over the entire side of the face with edema and closure of the eye of the affected side. Examination of the orifice of Stenson's duct in the mouth may show it to be red and swollen and one may be able to express a purulent exudate from it. This clinical picture may be accompanied by chills, fever and leukocytosis.

The surgical drainage of parotid fossa abscesses consists of making an incision anterior to the auricle, beginning above about the level of the zygoma downward to the angle of the mandible. The gland is then widely exposed by reflecting the skin and subcutaneous tissue. Transverse incisions are then made into the gland superficially and spread by a hemostat in numerous locations in order to facilitate adequate drainage of the many fibrous compartments of the gland. The branches of the facial nerve lie rather deep in the gland and are not likely to be injured by this technique.

X-ray treatment has been used with some success, especially in recurrent suppurations of the parotid gland. X-ray therapy is of particular value in the treatment of external salivary fistula.

The Retropharyngeal Spaces

Much of the credit for our present understanding of the retropharyngeal spaces should be given to the studies of Iglauer and his co-workers and later carried on by Tachiassny.

There are three potential retropharyngeal spaces:

1. The anterior retropharyngeal space is in between the mucous membrane of the posterior pharyngeal wall and buecopharyngeal fascia which envelops the constrictor muscles of the pharynx posteriorly. There is a fibrous median raphe in the mid-line which is attached to or fused in the buccopharyngeal fascia; it is not attached to the vertebra, as has been described by many text books. There are retropharyngeal lymph glands on each side in this space, at about the level of the second cervical vertebra, which drain the nose, sinuses and nasopharynx. This space is the site of acute pyogenic retropharyngeal abscesses which are seen usually in children. There is a swelling of the posterior pharyngeal space usually limited to one side by the mid-line attachment of this space. These abscesses rarely extend laterally into the pharyngomaxillary fossa from which they are limited only by a thin sheath of fascia. They are limited below by the attachment of the buccopharyngeal fascia to the posterior surface of the larynx, and do not, as a rule, descend into the mediastinum.

These abscesses are usually opened perorally with precautions taken to prevent aspiration of the infectious material into the lungs, a vertical incision is made in the posterior pharyngeal wall over the point of maximum swelling. This incision is made only deep enough to evacuate the pus. If the incision is made deeper the post-visceral space may be opened and contaminated, thus opening the way for the infection to extend into the mediastinum.

2. The middle retropharyngeal space, or the post-

visceral space is located between the prevertebral fascia covering the cervical vertebra and the buccopharyngeal muscles and their fascia. This space contains only connective tissue, there are no lymph nodes present. Infections in this space are not confined to one side because there is no median raphe and they readily descend into the mediastinum. Because of the possibility of early mediastinal invasion, infections in this space are the most serious of all deep neck infections. The most frequent cause of post-visceral infections are trauma of the posterior pharyngeal wall or esophagus by foreign bodies or by instrumentation. Clinically the patient presents a bilateral swelling of the posterior pharyngeal wall which is usually low down in the hypopharynx. This is accompanied by dysphagia, dyspnea, fever and leukocytosis. There may be swelling of the neck externally with crepitation due to air in the tissues, which may be demonstrated by x-ray studies.

Chemotherapy has saved the lives of a great number of these patients, but in some cases a cervical mediastinotomy may be necessary. In this procedure an incision is made along the anterior border of the sternocleidomastoid muscle, the carotid sheath and its contents retracted laterally, and the post-visceral space behind the trachea and esophagus, which leads downward into the mediastinum, may be opened and drained.

3. The prevertebral space is between the prevertebral fascia and the cervical vertebra. This fascia is firmly attached to the vertebra, and because of this infections usually do not descend into the mediastinum or spread anterolaterally into the parapharyngeal spaces. However, they may extend laterally along the scalenus muscles, behind the sternocleidomastoid muscle, into the supraclavicular or axillary fossa.

This space contains no lymph glands and it is the site of tuberculous or cold abscesses which are secondary to caries of the cervical vertebra. Abscesses occurring in this region are treated conservatively and never opened perorally. If necessary they are opened externally behind the sternomastoid muscle; this approach opens the prevertebral space without entering the postvisceral space.

Infections of the Pterygomaxillary or Pterygomaxillary Fossa

This fossa is located behind the maxillary sinus, lateral to the muscular plate of the pterygoid process, lying deep to the temporomandibular articulation.

Infections of this space are derived from the last upper molar teeth or following maxillary block anesthetics. They are comparatively rare and are indicated by swelling and pain in front of the ear over the temporomandibular articulation and zygoma, accompanied by marked trismus.

This space may be reached surgically by an incision made above the zygoma, spreading the fibers of the temporal muscle and passing a curved hemostat downward and inward beneath the zygomatic arch into this fossa.

Infections of the Submental Space

This space occupies the supra-hyoid triangles between the symphasis of the mandible and the hyoid bone. When infections occur in this region they may be easily drained by a transverse incision made through the skin and superficial fascia, spreading the fibers of the mylohyoid and geniohyoid muscles in the mid-line, and opening the abscessed cavity with a hemostat. There are no large blood vessels or other vital structures in this region. Occasionally these infections may point in the floor of the mouth and can be easily drained intraorally.

Complicatons of Deep Neck Infections

Deep neck infections themselves are considered as serious complications of infections occurring in the upper respiratory tract. When a complication develops in the course of these conditions, it may rapidly terminate fatally.

Hemorrhage is the most immediate dreaded complication, and if massive in character it will prove fatal. Usually there is some evidence of this impending danger, as the patient may have some recurrent bright bleeding from either his pharynx, ear, or from the external incision which was made to drain the abscess. This is a danger sign that calls for immediate ligation. This bleeding is due to erosion of one of the major arteries of the neck; infection will thrombose a vein and it will not bleed, but it will not thrombose one of the large arteries. Hemorrhage is more common in infections of the pharyngomaxillary space because the carotid arteries pass through this space. When this type of bleeding occurs during the course of a deep neck infection, the carotid arteries should be exposed and the external carotid ligated; if the bleeding does not stop, the common carotid should be tied. It is realized that ligation of the common carotid may cause brain complications, or paralysis, and may be fatal in a few cases; however, the danger of massive hemorrhage is a far greater danger to the patient's life, and one should not hesitate to ligate the common carotid in such a desperate situation.

Laryngeal obstruction may occur, and these patients must be watched constantly for evidence of obstruction. The neck infection may extend along the buccopharyngeal fascia which covers the buccinator and constrictor muscles of the pharynx and block the lymphatic drainage of the larynx, resulting in edema and obstruction to the airway.

This condition sometimes occurs rather suddenly necessitating an immediate tracheotomy.

Septicemia may occur as a complication of neck infections due to thrombosis of the veins and bacterial invasion of the blood stream. Septicemia is more common where a cellulitis is present. In most cases it can be controlled by the combined use of penicillin, streptomycin and the sulfonamides.

Occasionally secondary involvement of some vital organ may lead to a fatal termination of infections of the neck, such as brain abscess, meningitis, nephritis, pneumonia, myocarditis or mediastinitis.

The Medical Treatment of Deep Neck Infections

Since the advent of the sulfonamides, penicillin, and streptomycin and their use in the treatment of severe infections of the ear, nose, throat and mouth, the number of deep neck infections complicating these conditions has markedly decreased. It is found that these drugs, if administered early and effectively, may prevent the spread of a cellulitis or abscess formation. In cases where they do not prevent suppuration it is found that they aid in the localization of the infection and make surgical drainage more simple and decrease the degree of sepsis.

Bacteriologically it is found that these infections are practically always mixed types and include some of the pyogenic group. Beck found the streptococcus hemolyticus to be most common, and he reported 40 per cent of 100 cases reviewed to show a pure culture of this organism, while 80 per cent of this group revealed some form of the streptococcus. Other organisms found include the staphylococci, pneumococci, Vincent's fusiform spirochete, gas bacilli, and colon bacilli.

In the medical management of virulent mixed types of infections, "blitz therapy" or the combined use of penicillin, the sulfonamides, and streptomycin is advocated. It is not practical to wait for culture reports before instituting treatment, but we should use our past experiences and the findings of others in determining the type of organism with which we are dealing. The combined use of the above drugs will enable one to exert the maximum effect against each organism, and it also aids in some cases in which the offending germ has become "fast" against the therapeutic agent used. It has been proven that some organisms become resistant to these drugs, particularly against penicillin; the Gram-negative bacilli and some forms of the streptococcus and staphylococcus produce a substance called penicillinase which destroys penicillin, rendering it ineffective.

Penicillin is generally our most effective drug against cocci; the Gram-positive group, including all types of the streptococci, staphylococci and pneumococci, and the Gram-negative cocci or the Neisseria group. This drug is useful, but to a lesser degree, against the bacilli.

Streptomycin is most effective against bacilli, particularly the Gram-negative, including the colon group, proteus and Friedlander's bacilli, and the acid-fast tubercle bacillus. In general, it is not useful against cocci, but in some cases in which the streptococci and staphylococci have become resistant to penicillin, they have shown some sensitivity to streptomycin.

The sulfonamide drugs tend to overlap the uses of penicillin and streptomycin, but to a lesser degree, and in general they are weaker and less specific. They are most effective against the streptococcus, pneumococcus and staphylococcus. Sulfadiazine, sulfathiazole and sulfamerazine are the most frequently used sulfonamides. In fulmonating mixed infections it is now felt that it is best to combine these three sulfonamides. Each drug has a crystallization point of its own, and each will crystalize out as if the others were not being used. Because of this each drug can be given up to its toxic point. By this method it is possible to hold the blood concentration of the sulfonamides up to 15 to 20 mg. per 100 c.c. without danger of crystallization.

Although the use of these drugs may greatly influence the course of these types of infections, it does not supplant surgery, and if suppuration has taken place it should be surgically drained. To procrastinate and postpone surgery beyond a reasonable stage is only to invite a more serious complication.

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Advances in Surgery of the Colon and Rectum

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THE IMPORTANCE of preoperative management and postoperative care of patients undergoing operation on the colon and rectum is well recognized. One should be ever mindful that sound judgment and meticulous attention to technique must always remain the basic requirement for efficient surgery. However, experience has taught that correction and maintenance of physiologic equilibrium, improved methods of anesthesia administration and its supplementary measures, as well as the management of complications, have placed surgical achievement on an unprecedentedly high plane.

Without equivocation, suction drainage for acute intestinal obstruction, designed by Wangensteen and Payne, remains the greatest single advance in surgery of this generation. Comparatively few, however, utilize this procedure as a prophylactic measure. In the vast majority of instances, patients upon whom resection is to be instituted for lesions of the large bowel are intubated with the mercury-weighted Miller-Abbott tube just prior to operation, the tube is left open during surgical procedure, and suction is continued for some thirty-six to forty-eight hours thereafter. We are convinced that this measure approaches the ideal.

Careful preparation of the bowel prior to surgical treatment with antibacterial agents has been undoubtedly a significant factor in lowering the mortality and morbidity. Even though the enthusiastic reception accorded chemotherapy has become tempered somewhat due to the advent of the newer antibiotics, there is striking evidence available to attest that the nonabsorbable sulfonamides are of distinct value. Except in the presence of obstruction, phthalylsulfathiazole is given in suspension form for a period of five to seven days prior to surgery. Following operation, penicillin in large doses is administered and phthalylsulfathiazole continued by mouth after removal of the suction. Streptomycin and more recently aureomycin, intravenously, have been found efficient antibacterial agents.

Another advance in the management of large bowel surgery is the administration of whole blood during operation. As can be readily appreciated, the circumstance of a suddenly depleted blood volume calls for immediate replenishment, and the quickest and best means to accomplish increase in the blood volume is by direct infusion of blood. Therefore, all patients submitted to radical extirpation routinely receive a minimum of 500 cubic centimeters of whole blood during operation, and if for some reason it is not obtainable, plasma is substituted.

The administration of high concentrations of oxygen in the immediate postoperative period, as Sherman has shown, is of distinct value as a supportive measure against peripheral vascular collapse since it is during this period that a considerable degree of arterial oxygen unsaturation exists.

The nutrition of the surgical patient has attained a position of paramount importance. Intensive research in this field has resulted in the monumental discovery of protein hydrolysates which could be administered parenterally. Similar advances have been made in parenteral vitamin therapy and in the use of plasma and blood; also our knowledge of water and electrolyte balance has been extended. In estimating fluid requirements it is necessary to consider the average daily intake, the loss of fluids from the body, the estimable loss from the kidneys, gastrointestinal tract and Wangensteen suction, as well as the insensible loss from the skin and lungs. The urinary output and clinical evaluation of the patient have been the most valuable indices to the status of body water balance. Attention should be called to the danger of salt intoxication, since Coller and his co-workers have repeatedly demonstrated that patients do not tolerate large amounts of sodium chloride during the immediate postoperative period.

An unprecedented interest has arisen during the past few years in thromboembolic disease. Like many others, we have favored the conservative method of anticoagulant therapy in the form of oral dicumarol. Continuous intravenous heparin is used until dicumarol becomes effective, especially where a more rapid anticoagulant effect is indicated, as in instances of pulmonary embolism.

Much has been written on the subject of early ambulation, particularly since the investigations by Leithauser and Bergo in 1941. There is little doubt that all will subscribe to this procedure

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if based on personal experience. Certainly postoperative complications and sequelae are less frequent.

The use of alloy steel wire has assisted materially in lowering the evidence of wound dehiscence. Babcock, Abel and Jones have given evidence of its superiority. Our own experience covers a period of approximately eleven years and continues to be a routine procedure.

Space does not permit more than mere mention of the management of chronic ulcerative colitis, but it is well to realize that chemotherapeutic measures and particularly the newer antibiotics have proved of only moderate value. It is interesting to observe the comparison of large groups of patients treated medically and those subjected to colectomy. While a far greater percentage may be controlled under a rigid medical regimen, one must be ever mindful that the mortality with such is higher than following colectomy. In our own group of 235 cases, operation was instituted in fifty-nine instances and colectomy was carried out in seventeen. The mortality from resection was nil. Of even greater import is the fact that 94.1 per cent were rehabilitated, enabling all but one to return to their former means of livelihood.

Perhaps a word may be said regarding resection of the colon and particularly the rectum. We have been criticized repeatedly for condemning the establishment of an abdominal colostomy. We still believe, in fact we are firmly convinced, that an abdominal colostomy is performed needlessly much too often. For low-lying growths in the rectum within 6 centimeters of the anal margin and those involving the anal canal, an abdominoperineal method of excision of the Miles type with a permanent abdominal colostomy is the procedure of choice and is the only one to be heartily recommended. Malignancy of the sigmoid in the majority of instances lends itself well to resection and immediate establishment of continuity. In our opinion cancerous growths in the ampullary rectum and rectosigmoid are best extirpated by proctosigmoidectomy, without colostomy and with preservation of the anal sphincter musculature. The results, both immediate and remote, have been and are completely satisfactory from the standpoint of operative mortality, morbidity, local recurrence, sphincter function and particularly the percentage of five-year cures.

It is well to be mindful that extended resection, namely, the removal of adjacent viscera, such as involved small bowel, uterus and adnexa, bladder, ureter, prostate, urethra and vagina, is a justifiable procedure, and our experience with what may seem to be mutilating extirpations has afforded a number of patients freedom from disease as long as five years or more. The value of extended radicality has been well substantiated by Appleby, Babcock, Brunschwig, Glass and Sugarbaker.

As a final word, attention is called to the frequency of primary multiple malignancy, which in our group of patients was 6.1 per cent. The routine use of the sigmoidoscope, the expert radiologic studies of the bowel followed by air inflation, the more careful palpation at exploration, and especially the removal of a more extended segment of gut, has undoubtedly increased the incidence of permanent cure from this dreaded malady.

MSMS

ATROPINE TOXICITY IN THE TREATMENT OF SCHIZOPHRENIA

(Continued from Page 185)

ceived twelve treatments. Dose varied between 20 and 32 mg. of atropine sulfate. Results: More accessible, delusions less fixed, but little essential change.

Case 15.—O. R., aged thirty-one. Continually hospitalized for ten years. Schizophrenia, catatonic type. Agitated, combative, coprophagic, destructive, in constant seclusion. No previous electro-shock therapy. Received twelve treatments. Dose varied between 20 and 40 mg. of atropine sulfate. Result: Much more cooperative, no longer destructive nor combative.

A group of chronic schizophrenic patients is being treated with toxic doses of atropine sulfate with demonstrable improvement in most cases. Atropine, by blocking the utilization of acetylcholine, produces autonomic changes similar to those observed during insulin coma. This type of therapy is inexpensive, safe, and practicable to administer with a minimum of personnel.

Our present series is being enlarged to include more acutely ill patients. A complete report will follow.

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Epidemiology -- Old and New

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THE CHANGES in the social and economic structure of the world that have taken place during the past one hundred years have had a fundamental effect on existing attitudes in epidemiology. The position is such as to require re-examination of the scope of interests to be included within that field and a fresh assessment of the place of epidemiology in the practice of preventive medicine and public health. Of the many factors that have led to this situation, two are outstanding. The first is that of this shrinking world[15]—that measured in terms of travel time, the world becomes progressively smaller, and that it tends to become more and more a single epidemiologic universe. The second influence is that of an aging population, a state of affairs that now characterizes most modern civilizations.

This Shrinking World.—Since earliest historical times, trade and travel have been recognized as factors contributing to the frequency and seriousness of disease processes. In ancient times, the contacts of peoples were necessarily peripheral and indirect, except as they resulted from invasion or conquest or the forced migration of populations. The numbers that moved about were small, and progress was slow.

A progressive change has been under way since the fifteenth century, a change that experienced a marked impetus in the nineteenth century and in the past twenty-five years has brought alterations that are no less than astounding.[3] Those associated with the airplane are obvious. No place in the world is now more than three to five days removed from Detroit or Grand Rapids, considering only commercially available and wholly ordinary means of transport. The change in sea travel has been less evident and of slower evolution, but compared with the days of sailing vessels is no less striking. The effects brought about by the modern technology of transport and travel are not limited to international considerations. Those within countries are just as marked. They have brought about a mingling of peoples that is of even greater moment epidemiologically than those which concern nations.

More is involved than the matter of speed. As distances shrink, the amount of travel tends to increase and with it a greater interdependence of peoples one on the other. A direct result of the introduction of rapid transport is the growth and multiplication of great cities and the industrialization of whole areas, of such moment as to approach the practical reality of huge groups of people with one water supply, one milk supply and one food supply. The transportation of the world has not only changed the world itself but also the course of civilization.

Although the ultimate has not been reached, the world tends to fuse into a single epidemiologic universe. The trend is so definite that today it is difficult to recognize the separate epidemiologic units that existed not so long ago, units that were marked by continental if not by national boundaries. The tropics are no longer the remote areas of a generation ago. People go there in the course of their ordinary activities; they acquire the diseases there prevalent, and often they bring them home with them.

An Aging Population.—Since 1850 the population of the United States has shown an increasing proportion of people in the older age groups, and correspondingly fewer children and young adults. Persons aged more than fifty years included 13.3 per cent of the population in 1900; the proportion is now almost twice as great, and the estimate for the year 2000 is 33.0 per cent.[16] Children aged less than fifteen years made up 41.6 per cent of the population of 1850, but by 1950 the proportion had dropped to 25.7 per cent. These changes characterize the people of modern civilizations generally and throughout the world. They are less marked in primitive regions but will become more evident just as surely as an improved public health leads to a lesser cost from communicable disease and fewer deaths from infection in childhood.

The diseases of an older population are not those of a younger people, especially when that older population is subjected to the continuous salting with infection which is characteristic of modern metropolitan populations.

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The Changing Character of Mass Disease Problems

The mass disease problems that affect modern communities have been notably altered within a century. The causes are many, a great many more than the two just presented. They relate both to man as an organism and to the environment in which he lives. Some diseases now have far less significance; others have come from an inconsequential position to rank among the leading causes of death or as major factors in lost efficiency or disabling illness. What has happened, however, is more than a matter of differences in relative importance of the numbers of persons involved. In many instances, the nature and character of a mass disease has changed. Less often, new problems have been introduced by reason of the shifting ecological state. The communicable diseases provide the best illustration of these several considerations, principally because custom has long marked this group as the type of mass disease problem.

Communicable Disease.—Comparing present conditions with those that existed a hundred years ago, the changes that have occurred among the communicable diseases are so great as to constitute almost another world. Intestinal infections are far less frequent. Diseases transmitted through discharges of the upper respiratory tract find a much more important place among infections in general. The situation is less definite for diseases spread by direct contact, although the trend in incidence is that of the respiratory diseases, with the result that these conditions likewise become of greater moment as the agglomeration of peoples becomes more pronounced. The venereal diseases, as representative of the class, still remain the problem they always were. An improved control of arthropod-borne disease has been an outstanding accomplishment of recent years, so successful as to have restricted measurably the frequency of those conditions. Among diseases of man originating from animals, more has been done about infections associated with domestic animals than those where wild animals are the reservoir. No reason exists for believing that the actual frequency of diseases of animal origin has increased, but relatively they become more important among classes of communicable disease because of the lesser numbers arising from other sources.

One or other of two general means is useful in judging quantitatively the changes that have taken place in the frequency of communicable diseases. The first is through comparing computed rates of incidence in terms of units of population. The second is through examining the relative standing among mass diseases as causes of death.

In 1900 the ten leading causes of death in the United States included five infectious diseases. The current list has only two. First place in 1900 was occupied by an infectious disease, tuberculosis. By 1946 the highest rank held by a communicable process was sixth, for pneumonia of all forms. An examination of the two lists of diseases responsible in 1900 and in 1946 for the greatest numbers of deaths will demonstrate that the advances made have had to do with the communicable diseases where prevention rests largely on community measures. The current problems are provided by those other diseases where prevention depends so much on individual initiative and on the activities of the private practitioner of medicine. As for the communicable diseases themselves, an increasing tendency is seen toward an established equilibrium in clinical behavior and in community frequency, of the type which has been so satisfactory and so long continued with mumps.

With some caution it may be suggested that the days of the great epidemics are over. This appears likely if environmental conditions remain as they are or continue to follow the trend they now do. If the environment is altered materially or new factors are introduced, such as another French Revolution, almost anything could happen, including reversion to epidemic situations that characterized the world of a century ago. The composite experience of the past hundred years and especially that of the recent global war supports the opinion of a favorable future in respect to major world outbreaks. The history of a typical American city, Philadelphia, is examined with profit. The greatest epidemic of modern times, the pandemic of influenza of 1918, was a small affair in terms of deaths compared with the earlier epidemic visitations on that city. The experience is not unique. A similar course of events has characterized other representative American cities, Boston, New Orleans, Chicago and New York.

The greatest attention and the principal interest in epidemiology continues to be directed toward the communicable diseases, not because these diseases are dominantly important, for actually they are of lesser relative moment than some others. It is largely because they are better and longer

understood. It is therefore reasonable for the communicable diseases to continue to be the fundamental concern of epidemiologists. The gains that have been made must be held. Perhaps the more important consideration is that these diseases offer the most favorable opportunity to gain familiarity with the epidemiologic method. The reasonable approach to the broader and less well explored fields of mass disease is through expansion and transfer of that method.

Noncommunicable Organic Disease.—The important community health problems of the present are concerned with those organic diseases which are not communicable from man to man and not caused by a specific infectious agent. This is just as true if judgment is based on another of the major criteria, not on deaths but on defect or disability.

Heart disease now ranks as the first cause of death in the United States; and deaths from cancer, from circulatory disturbances, from metabolic diseases, nutritional disturbances, and the degenerative diseases are well up on the list. A direct relation is seen with the altered social and economic conditions of the present century. Many of the changes have been brought about by the newer age characteristics of the population. With fewer deaths from communicable disease, people now live longer, and long enough to acquire conditions which are so largely limited to older people. This is a natural evolution. Disease, and particularly communicable disease, is an unnatural means through which to govern population numbers. The natural means of elimination is through old age and accident.

The practical result of this shifting situation is an established and increasing trend among public health workers to accord greater emphasis to diseases characteristic of old age and less to the health problems associated with communicable disease. This is a reasonable attitude, as the evidence already introduced has demonstrated. However, a satisfactory perspective and a balanced judgment are necessary in the newly developed enthusiasm about geriatrics. The health of children is still the important consideration among public health problems, admittedly not because of communicable disease but because of nutrition, growth, development and the varied psychiatric disturbances. The child has a life expectancy of many years; that of the older group is brief. The greater profit in years of healthful living is alone sufficient reason for greater stress on the mass diseases of childhood. The kind of years that are gained is of equal significance: for the child these are years of productive and creative effort; for the older person they are likely to be not only few but relatively unproductive.

Functional Disease.—Of all mass health problems of communities, more interest has been given to organic disease than to functional disturbances.[17] A number of reasons account for this difference. There is greater ease of recognition, a more ready establishment of cause, and a greater availability of methods for measuring both cause and effect. It is just being appreciated that mental disorders, the problems of addiction to alcohol and tobacco, and the social diseases concerned with occupation, recreation and the intellectual pursuits of man, also constitute group as well as individual problems. As a field in epidemiology, these mass diseases of functional origin have scarcely been touched. There is every indication of a developing activity within the immediate future.[7]

Injuries.—With the advent of a modern practice of medicine some fifty years ago, the duties of a physician came to be understood as something more than the care of the sick and the injured. The obligations of the doctor were defined as "first to prevent disease; if that is not possible, to cure; and if that is impossible, to alleviate." The newer concept of prevention, as it developed, was applied almost wholly to disease, to the sick. The injured were largely forgotten until the recently aroused interest in the civilian problem of accidents and such military conditions as trench foot, battle casualties, and the ordinary injuries of military life. Collectively, these are the problems in an epidemiology of trauma.

Accidents of all forms, as judged by data of 1947, ranked fourth among causes of death in the United States. The traumatic injuries after accidents can be demonstrated to conform to the same biologic laws as do disease.[5] They are amenable to the same epidemiologic approach, and, what is least well appreciated, they are preventable and controllable. Instead of something set apart from disease and scarcely to be considered within the scope of preventive medicine, injuries are as much a public health problem as measles.

Current Direction of Epidemiologic Interests

Evidence has been presented of the wide range of pathologic conditions included within modern ideas of mass or community disease. The approach to solution of problems concerned with mass disease, as typified by the communicable diseases, has been through epidemiology, a biologic discipline concerned with disease as it affects groups of people. Medicine and public health would thus appear called upon to alter existing interpretations of the field of usefulness of the epidemiologic method. A limitation to the communicable diseases is no longer warranted by present-day conditions. The larger problems of public health lie with other diseases, both organic and functional, and with injuries. The validity of that concept depends upon the assumption that all mass diseases and injuries conform to the same biologic laws of ecology as do communicable processes. It is believed they do.

If an etiologic interpretation of disease and injury is the basis of modern practice, and it surely is, then the agents that give rise to the many pathological conditions must be variously viable and nonviable, sometimes transmissible and sometimes not. If morbid conditions of man are the result of a reaction between the human host and his environment, then all disease conditions can be interpreted in terms of three principal factors. The first is the agent, either an inanimate object or substance, or a living thing that directly gives rise to the condition. The second is the host, the living organism affected or injured; and man, of all living things, is the most important host. The third factor is the environment in which host and agent exist, an environment which has much to do with determining the qualities and activities of both, and additionally has a strong influence on the nature and effectiveness of the interaction that takes place between the two. Thus looked upon, disease and injury, and also the physiologic state, are recognized as ecologic phenomena and amenable in their group manifestations to the methods of epidemiologic analysis. Epidemiology is seen as a biologic discipline applicable to all diseases where groups of persons or things are involved, to include both plant and animal.

The development of new knowledge or the introduction of new conditions commonly calls for a change in methods or a shift in emphasis. Evidence has been presented that the world tends to become one epidemiologic universe, that it is experiencing a changing character of population, that the social and economic environment has been markedly altered. This has resulted in altered values among mass disease problems. To meet its obligations to preventive medicine and public health, epidemiology needs to broaden its interests. As expressed by Dr. Joseph Mountin,[13] it is high time that epidemiologists escaped their Broad Street pump fixation. The reference, of course, is to the classical studies of Snow[14] on cholera, where the foundation was laid for the field method in epidemiology and from which developed the established association of epidemiology and communicable disease. The implication in this trite remark is that restriction to a concern of communicable disease, to the neglect of more pressing problems, is no longer justifiable. That epidemiology should give more attention to the mass problems of organic and functional disease generally, and less to communicable disease, may be accepted as principle, applying with little reservation to the countries of North America and Western Europe. It is in line with the altered conditions of the modern world. For many countries the communicable diseases still remain the first consideration. Little doubt exists, however, that this is the epidemiology of the future, to become increasingly applicable in most countries of the world.

Epidemiology in Relation to Medicine and Public Health

Epidemiology is understood to be an independent general biologic discipline, the basic science of public health. The function of public health services is accepted as "the application of the sciences of preventive medicine through government for social ends, the purpose not to salvage the individual but to understand and reduce sickness of any kind of a community or group." Here is a clear separation of interests. The prevention of disease in the individual, which is the function of preventive medicine and of the medical practitioner, is distinguished from the prevention of disease in the group or community, which is the concern of public health and of public health workers. If public health is a branch of knowledge distinct from medicine, and the separation is believed well made, then public health must rest on some fundamental discipline which is characteristic of its activities and individual to it. Public health deals with groups of people, and epidemiology is the study of disease behavior as manifested by groups. For this reason epidemiology is stated to be the basic

science of public health. It occupies no exclusive position, for all of the sciences of preventive medicine come into play, and other disciplines are of greater importance in the control and management of community disease. It is basic in the sense that it is the point of departure, the means by which mass disease is recognized and appraised. It is perhaps best understood as the counterpart of diagnosis in clinical medicine.

The study of disease as a mass phenomenon differs from the study of disease in the individual primarily in respect to the unit of investigation. It is early appreciated that the herd, the crowd or the community is not a simple aggregate of the persons comprising that grouped population, but that each universe of people is an entity, a composite that possesses as much individuality as does a person. The methods and techniques used in the study of the herd likewise differ from those applied to the individual, to such an extent that Greenwood[6] has well remarked that a man highly skilled in individual diagnosis and treatment may be wholly unskilled in generalization. The differences and the similarities in the approach to problems of health and disease as they concern the group and the individual may be examined with profit.

Fundamental to all activities in clinical medicine is a knowledge and a familiarity with rather an imposing array of sciences. Medicine these days has use for scientific disciplines of a wide order. The list starts with what are commonly termed the medical sciences. Included are the disciplines which have been a part of medicine from its earliest history: anatomy and physiology, histology and embryology, with pathology occupying the central position, and then the newer disciplines of biochemistry and bacteriology. All are supported by the natural sciences, principally physics and chemistry. To exclude the mathematical sciences would be to leave doubt that medicine is the science it surely is. The broadening interests of medical practice within recent years require addition to this list of a number of social sciences, economics, sociology, and psychology, and, with little debate, the less directly applicable biological sciences such as anthropology and genetics. The list is by no means exhausted, for medicine, in furtherance of its broader obligations of prevention as well as therapy, progressively finds need for most of the physical and biological sciences and increasingly those of the social group. With the principal objective of the physician the prevention and cure of disease and injury, it is reasonable that the primary interest in these disciplines is more utilitarian and indirect, rather than fundamental and as a matter of specific concern. They occupy the place they do in clinical thought for a single reason, and that is the degree to which they contribute to a central discipline called diagnosis. This is the means by which disease of the individual is recognized, evaluated and judged as to final outcome. Clinical medicine revolves about diagnosis, for this is the branch of knowledge that directs and determines the ultimate objective, the proper management and treatment of the patient.

The approach to the problems of the group is much the same. The fundamental need for the basic sciences is no less. Some few, such as biostatistics and toxicology, receive greater emphasis; others, such as anatomy, somewhat less. Again, the concern with the fundamental sciences stems from the same need, that is to say, the aid they contribute to a central discipline that is also concerned with the recognition, evaluation and prognosis of disease, but this time as it affect communities rather than individuals. This discipline, epidemiology, is the counterpart of diagnosis and bears precisely the same relationship to public health practice as does diagnosis to clinical management. Epidemiology and public health practice act for the group as do diagnosis and treatment in disease of the individual.

This concept of itself suggests that epidemiology is a discipline with implications more far reaching than the study of epidemics. In the first place its usefulness is not limited to the professional worker in public health. Although dealing with smaller units, the clinician makes use of the methods of epidemiology in applying preventive medicine to family groups. Almost no individual illness fails of an impact on the persons who surround the patient. Such practice of small group epidemiology differs not at all in principle from the activities of the public health worker in the broader problems where the population group is that of a city, a state or a nation. Other applications of the epidemiologic method to purely clinical problems are less well appreciated. One of the most practical is a substitution of epidemiological analysis and mathematical interpretation for the clinical impression derived from case reports. It serves thus in the evaluation of new drugs and methods of treatment, in determining the usefulness of sug-

gested diagnostic procedures and in precise definition of the clinical course and behavior of a disease or injury. The epidemiological method would appear the reasonable approach in search for a better definition of the precancerous and the prediabetic states upon which more than anything else rational and successful prevention depends. It provides the ultimate means for testing the value of results from experimental microbiologic research, in such matters as the causes of communicable disease or in modes of transmission. A passing familiarity with the medical literature of the day suffices to show the increasing extent to which the epidemiologic or group approach is being incorporated into modern clinical practice and investigation.

The uses to which epidemiology is put by the professional public health worker are better known. The traditional application is in the study of epidemics, but even for the communicable diseases such limitation has long since passed. Far more effort is directed towards the study of infections as they occur under ordinary circumstances, with the result that endemiology or study of the long continued behavior of a disease through field survey in a community, far outweighs the effort expended on the accidental and bizarre epidemic. Epidemiology thus progressively becomes more a study of the whole natural history of disease than of its unusual manifestations.

The field method of epidemiological study has other uses in applied public health than the direct investigation of disease. The administrator turns the method to his purposes in determining the necessary provisions for hospital care of community populations.[2] It is the accepted procedure in appraisal of the accomplishment attained in programs for prevention and control of a disease.[1]

Research in the field, through study of disease as it manifests itself in nature, is an important and independent approach to solution of medical problems. Modern medical progress has been so thoroughly associated with research in the biological laboratory, and it has been so largely a development of the experimental method, that this other and older method has come in recent years to be overshadowed. Progress through experiment is oftentimes slow, and dead ends are met, with the result that an increasing tendency becomes evident, to try the new and yet old approach through field epidemiologic methods. This is by no means limited to the communicable diseases, for the value of contributions from the field is so definite that similar methods are being turned toward other areas of mass disease, such as cancer[11] and specifically cancer in industry.[8] There is much activity in the field of nutritional disturbances,[12] with dental metabolic diseases,[4] and currently in diabetes[18] and thyrotoxicosis.[10] Even such unusual fields as the congenital anomalies[9] now engage the attention of the experimental epidemiologist.

With full appreciation of the contributions made to modern medical progress through skilled observations by the individual practitioner, there is nevertheless an increasing appreciation of the extent to which knowledge of a total problem can be enlarged through analysis and study of the facts accumulated by many observers; that benefit is to be derived through investigation of disease processes as they affect groups of people, as a means of supplementing clinical study of the individual patient and the knowledge to be derived from experiment. It likewise becomes increasingly evident that to understand fully all the variations which disease may show, it is necessary to draw on the experience of the world and not to reason too broadly from results obtained in a small section of a single country. Disease shows many peculiarities under the multiple influences of varying environment and that applies not alone to the communicable diseases. Diphtheria and cancer are almost universally described in terms of the clinical and epidemiological behavior they evidence in north temperate climates. What occurs in the tropics is often widely different. An international viewpoint becomes increasingly necessary for a full and clearer comprehension of disease.

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Clinical Pathologic Conference

By D. H. Kaump, M.D., M. R. McQuiggan, M.D., and L. J. Bailey, M.D.
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CASE ABSTRACT is presented by Dr. Kaump. The patient we are presenting here has many interesting features.

This forty-year-old white woman was admitted to Providence Hospital on two occasions. She had been born and raised in a small town in Michigan. After marriage her husband took over the family farm. This life and her husband's periodic bouts of intoxication were very distasteful to her. In the past she had quinsy and many sore throats in childhood, attacks of purulent sinusitis at the ages of seventeen and thirty-four years, excision of a rectal fissure at seventeen years, tonsillectomy at thirty-five years, and incision and drainage of a felon at the age of thirty-nine years. She had usually drunk unpasteurized milk and well water. One brother had died of "kidney disease;" the father, mother and other siblings were living and well. She has four children, all living and well.

Slightly more than five years prior to her first admission she had a series of multiple deep-seated boils. This was followed by an attack of vomiting, epigastric pain and diarrhea which lasted for several days. During this period she became prostrate and then slowly regained her normal strength. Three years, two years, nine months and three months before admission there were similar attacks. Ten months prior to admission she had hives which lasted one night. At that time she was taking iron, vitamin C and cold tablets. One month ago her present illness started with a severe attack of diarrhea, fever, chills and vomiting. During this attack she was unable to retain any food, became nauseated, and because of the duration of the attack was referred to Dr. W. P. Chester in Detroit. During the period of her illness she had lost 20 pounds in weight, and at the time of hospitalization weighed approximately 90 pounds. On two occasions she had vomited the oral dye given for gallbladder studies.

On physical examination the blood pressure was 90 mm. of mercury systolic and 60 mm. diastolic. Her abdomen was scaphoid and tender on very firm palpation in the midline. Otherwise the general physical and pelvic examinations were essentially normal.

After appropriate roentgenographic studies the following findings were noted: a tortuous and redundant colon; negative stomach and duodenum; normal renal outlines; and a normally functioning gall bladder (following the use of intravenous dye).

Among the laboratory examinations were noted, blood: erythrocytes 4.60 millions per cu. mm., leukocytes 13,250 per cu. mm., hemoglobin 14.1 gms. per ml., and a differential blood count of neutrophiles, 91 per cent (nonfilamented cells, 3 per cent) and lymphocytes, 9 per cent. The total protein was 4.2 gm. per ml. with an albumin-globulin ratio of .95:1. The blood cevitamic acid level was 1.8 mg. per ml. In the initial urine the specific gravity was 1.015 with 1-plus albumin, negative sugar, leukocytes 1 to 2 per high dry field, and occasional granular casts. Gastric analysis after histamin stimulation was essentially normal. Agglutination tests for typhoid, paratyphoid and undulant fevers were all negative, and the opsonophagocytic index for brucellosis was 2. There were no parasites found on repeated stool examinations. S. Morgagni was isolated from the stools on culture. The Rumple-Leeds capillary fragility test was negative.

During hospitalization her temperature, pulse and respirations were essentially normal, and she was given a high caloric diet and small feedings with vitamin B complex intramuscularly. She was discharged free of complaints and in fairly good physical condition, with a weight of 89 pounds.

Fifteen months later she was readmitted to the hospital, this time with a distinctly different series of complaints. During the interval she had been diagnosed elsewhere as having a menopausal syndrome because of gradually diminishing menstrual periods and for two months a total amenorrhea. She had also noted some aversion to fatty foods which produced gas.

One month before her admission she and one of her children had sore throat, lymphadenitis and nausea with vomiting. The child recovered after two weeks of bed rest, but the patient did not.

At the onset of her acute illness there was a slight puffiness about the eyes for a few days with two or three loose stools at the onset. There was no history of ingestion of pork or pork products. Because of continued extreme weakness, nausea, vomiting, and a burning sensation like that of sunburn of the skin, together with severe night sweats, she was hospitalized. At no time had her temperature been over 99° F. Within the past few days there had been a rather sudden onset of a dull aching pain in the right angle of the scapula with marked weakness, right supra-orbital and occipital pain and pain in the right scapula running down the right side and into the right flank.

On physical examination there was minimal atrophy of the tongue. The heart was not enlarged and had no murmurs but did have a split second sound at all valve areas. The blood pressure was 96 systolic and 84 diastolic. The liver extended 1 cm. below the right costal margin. There was no peripheral lymphadenopathy. Although there was some dehydration there was no history of weight loss.

Among the laboratory examinations the urine had albumin 1-plus, a specific gravity of 1.022 and a few leukocytes and erythrocytes. The blood examination was as follows: erythrocytes 4.28 million, leukocytes 52,800 and platelets 231,000 per cu. mm., with a hemoglobin value of 12.8 gms. per ml. and a differential blood count

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From the Departments of Pathology and Internal Medicine of Providence Hospital and Wayne University College of Medicine, Detroit.

of neutrophiles 12 per cent, lymphocytes 4 per cent and eosinophiles 84 per cent. The sedimentation rate was .5 mm. in one hour (Westergren); clotting time six minutes (capillary tube), bleeding time seven minutes (Duke). In the peripheral blood smear there were numerous destroyed cells but no marked evidence of immaturity. Bone marrow aspiration indicated only a marked eosinophilia but no evidence of leukemia. The agglutination test for undulant fever was negative. The whole blood chloride value was 390 mg. per cent (normal: 450-500 mg. per cent).

During this period of hospitalization there was no elevation in temperature but a marked elevation in pulse (120 per minute). This rate gradually dropped to normal, became subnormal and was finally imperceptible. On the fourth day after admission she became nauseated; her color was poor, pulse irregular and of poor quality, and she developed labored respirations. This was followed by a state of shock for which oxygen was given. She became involuntary, the pulse remained of poor quality, and her condition was extremely critical with marked weakness. She then became comatose and breathless, with respirations of 38 per minute. She developed choking with marked difficulty in breathing and apparently died in a state of cardiac failure.

Because of the marked dissimilarity in the clinical picture of the first and second admissions, I should like to ask Dr. McQuiggan to discuss the first and Dr. Bailey the second of the two admissions.

Dr. McQuiggan: In the first admission the outstanding features are those of recurrent infections since childhood and those suggesting psychoneurosis.

In the differential diagnosis we must consider: infections by organisms of the Salmonella and Shigella groups, by Brucella, by parasites such as amoeba histolytica, intrinsic or extrinsic lesions of the bowel with or without obstruction such as regional enteritis, chronic ulcerative colitis, or tuberculous peritonitis, urinary tract infection as chronic pyelonephritis and finally a psychic disorder.

To explain the diarrhea, only S. Morgagni was found in the stools, and examinations for parasites were negative. The serologic tests for undulant fever were negative and the patient was afebrile while in the hospital. The roentgenographic studies of the gastrointestinal tract and gall bladder were essentially negative. The only positive findings on urinalysis were the sight albuminuria and occasional granular casts and leukocytes. These findings were not present three days later.

It would then appear that systemic infections and most lesions of the gastrointestinal, and genitourinary systems can be eliminated with the exception of S. Morgagni in the stools.

Thus, the outstanding points are, first, a patient who has S. Morgagni in the stool, and second, a large functional element. I am inclined to pay especial attention to the latter. There is a paucity of positive physical and laboratory findings but a great many functional features such as the worry of this patient relative to her family, insomnia, anorexia, agitation, et cetera.

In this patient especial attention should be paid to the functional element and adequate advice as to rest and sedation, proper high caloric, low roughage diet, and correction of those features in the patient's life which exaggerate an underlying psychoneurosis. After a rest period in the hospital, psychiatric consultation is indicated if the patient does not respond to managment in the hospital.

Dr. Bailey: The list of diagnostic possibilities which comes to mind as one hears the foregoing history includes the following: chronic nervous exhaustion, diarrhea due to colitis, either ulcerative or bacillary, gallbladder disease, bowel obstruction, parasitic disease as trichinosis or amebiasis, regional ileitis, sarcoidosis, undulant or typhoid fever, urinary tract infection, diabetes mellitus, tuberculosis with perhaps Addison's disease, allergy, leukemia or a leukemoid reaction, and finally a diffuse vascular disease such as periarteritis nodosa or disseminated lupus erythematosis.

The early psychic history indicates an excellent foundation for the development of chronic nervous exhaustion, and this in turn might readily lead directly to the development of ulcerative colitis and allergic reactions.

Early in the history we hear of multiple deep-seated boils followed by vomiting, espigastric pain, and diarrhea. Such a sequence might be due to diabetes mellitus, but subsequent clinical and laboratory observation ruled it out.

Ten months before the first admission there was a definite reference to an allergy in the form of hives. Thereafter she was nearly continuously ill until her admission with symptoms which resembled those previously experienced. In the first admission the significant findings were the slight polymorphonuclear leukocytosis, low serum albumin and the slight albuminuria accompanied by hyaline casts. The symptoms subsided spontaneously.

Fifteen months later she returned with the inevitable diagnosis which all women acquire at the age of forty. In addition, however, there was a sore throat and nausea with vomiting. There was a burning sensation of the skin and a confusing array of pains occurring in atypical patterns. The blood pressure was consistently low, the liver was slightly enlarged, there was a consistent high leukocyte count with eosinophilia but no enlarged peripheral lymph nodes. Albumin again was noted in the urine.

The leukemias are brought sharply into the range of possibilities at this time, but true leukemia is probably excluded by the peripheral blood smear and bone marrow examination.

The picture does not unfold as one would expect of ulcerative colitis, and the other gastrointestinal infections which I listed have been ruled out. Gall-bladder disease may have been present, but if so it was not a determinant of the symptoms which characterized this patient's last illness, and the same may be said of intestinal obstruction with or without regional ileitis.

The pronounced eosinophilia in the last illness would cause one to focus on eosinophilic leukemia, which is ruled out, trichinosis, allergies, lymphoblastoma and

Fig. 1. Case 3, small intestinal wall. The degenerative phase with fibrinoid necrosis of the media, a minimal mural and perivascular polymorphonuclear infiltrate and segmental distribution of the lesion (x75).

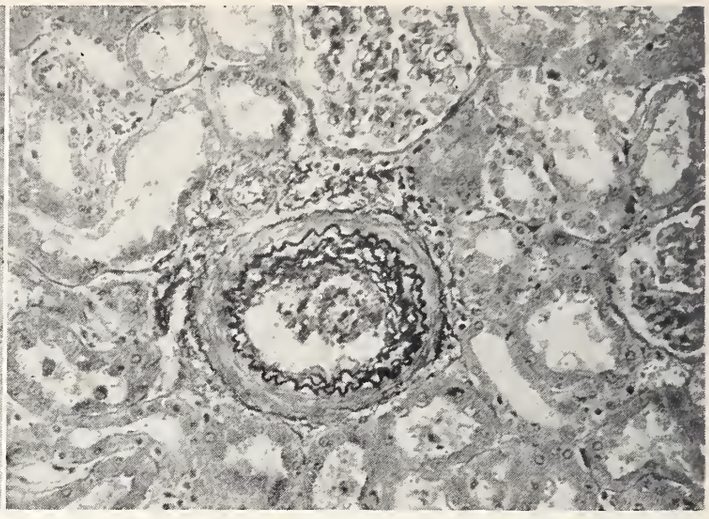

Fig. 2. Case 1, kidney. In the acute inflammatory stage with splitting of the internal elastic lamina, and minimal reactive endothelial proliferation. (Mallory-Heidenhain connective tissue stain) (x75).

periarteritis nodosa. The picture is atypical for all of these.

Trichinosis would scarely cause the long preliminary history; lymphoblastoma is partially ruled out by the bone marrow examination and the absence of enlarged nodes, and periarteritis nodosa is commoner in males, and produces a septic picture with fever and anemia. In favor of periarteritis nodosa is the early history suggesting an allergic background, and the multiplicity of systems involved: renal, cardiac, pulmonary, and gastrointestinal. The symptoms and signs of periarteritis nodosa are extremely variable so that no single description fits the clinical picture. Eosinophilia usually is found in some phase of the disease and when this blood finding is present, especially in a patient with albuminuria, periarteritis nodosa is the diagnosis of first choice, and further appropriate laboratory studies are indicated.

General Discussion

Dr. Kaump: Before I consider the pathologic findings on the patient we have just discussed, I will describe three other patients with the same pathologic findings, but each of whom had different clinical manifestations.

The first of these was a twelve-year-old girl who had a history of allergy and who during the course of her illness had large nasal polyps removed and subsequently a lobectomy for tubular bronchiectasis. Approximately six months following the lobectomy she developed lower abdominal pains of an indefinite character, albuminuria and a marked peripheral blood eosinophilia. She eventually developed congestive heart failure and expired approximately nine months after her first hospitalization.

The next was a thirty-nine-year-old housewife who had arthritis deformans for approximately twenty years and also gave a history of being allergic to many things. Her hospitalization was primarily for pneumonia, and during the period of hospitalization she received not only streptomycin and penicillin but also neoprontosil, in spite of a known sensitivity to sulfonamides, because of the refractory nature of her illness. She expired approximately twenty-nine days after admission to the hospital, apparently from cardiac decompensation.

The last case was a fifty-eight-year-old white man who had severe stiffness and multiple areas of neuritis in which the extremities were numb and ached severely at times. He also had an albuminuria of a minor degree, a leukocytosis and an eosinophilia of near 50 per cent. He eventually developed a complete paralysis of the lower extremities, a cord bladder, and expired because of a combination of pyelonephritis and phrenic nerve paralysis.

The gross necropsy findings in all four patients were somewhat disappointing. In Case 1 there were multiple acute, subacute, chronic and healing ulcerations of the small intestine which increased in number from above downward. These were scattered irregularly throughout the small intestine and in the latest phases left stellate scar formations. In addition to involvement of the small intestine there were infarcts in the kidneys, a soft nodular mass in the pancreas 2 cm. in diameter, a diffuse lymphadenopathy, a softening and a pale discoloration of the myocardium and multiple infarcts of the spleen.

In Case 2, I have only the description of the kidneys, in which there were multiple scarred in-

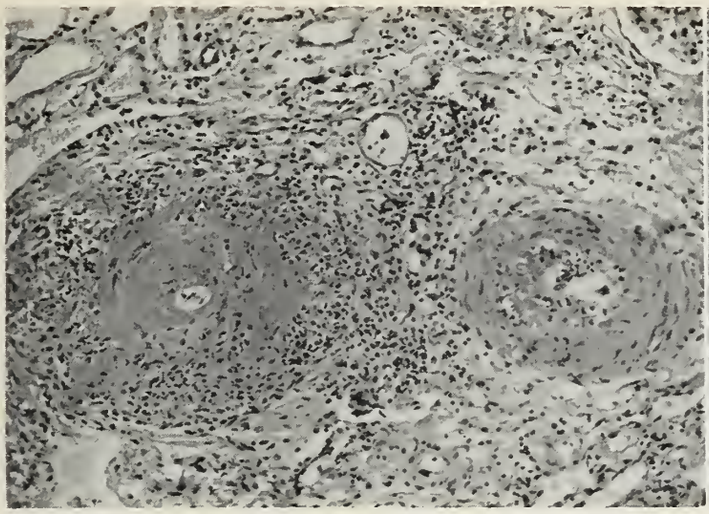

Fig. 3. Case 3, kidney. The granuloma stage characterized by marked fibrinoid necrosis of the vascular wall, narrowing of the vascular lumen and polymorphonuclear and eosinophilic infiltrate (x75).

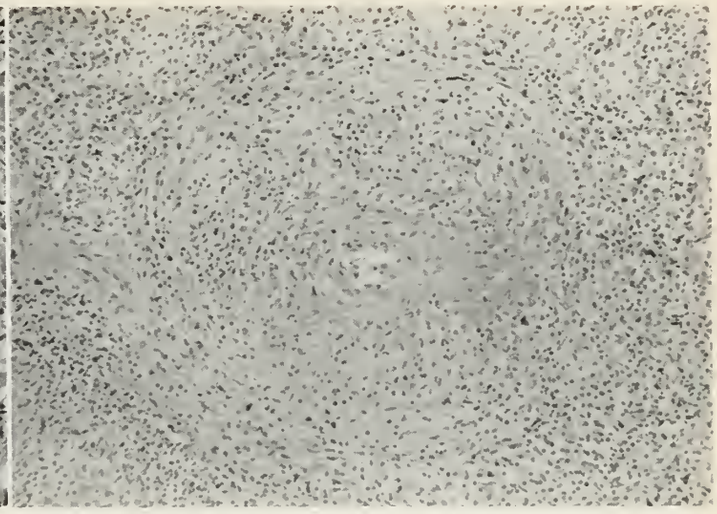

Fig. 4. Case 4, spleen. In the late granuloma stage the cellular reaction changes to one composed of lymphocytes and plasma cells. There may be an extension at the border (x75).

farcts. This necropsy was performed by Dr. Lawrence Gardner at Mt. Carmel Mercy Hospital, and it is through his kindness that we are able to include this patient. In case 3, there was nonbacterial pericarditis, cortical infarcts of the kidneys, a soft gray myocardium. In Case 4 there were multiple small grayish-white semi-translucent nodules which involved the mesenteric arteries, the larger arteries of the liver, the kidneys, the intercostal arteries and the arteries of the spinal pia. In addition the myocardium was soft. There was a pancreatic nodule, cortical infarcts of the kidneys and a generalized lymphadenopathy.

Microscopically, the picture in all four cases was essentially similar, and the lesions were confined principally to the arteries. The arterial lesions could be divided into four major classifications, as originally suggested by Arkin.

The first, or degenerative stage, consisted principally of edema with a fibrinoid necrosis of the media, a splitting of the media with a minimal polymorphonuclear infiltration and a slight perivascular polymorphonuclear infiltrate. The fibrinoid necrosis may have a suggestion of a segmental character and an early involvement and spread towards the intima and adventitia (Fig. 1).

In stage two, the acute inflammatory stage, there is first destruction of the internal elastic lamina (Fig. 2), and the media tends to be infiltrated with polymorphonuclear cells and a minimal reactive endothelial proliferation.

The third, or granuloma stage, is characterized by a marked fibrinoid necrosis, virtual destruction of the vascular wall, some fibroblastic proliferation and a quite intense polymorphonuclear infiltration (Fig. 3). The lumina of the vessels tends to be narrowed, and the polymorphonuclear exudate predominantly is of an eosinophilic character. The lumen of the vessel is often extremely narrowed and in some cases occluded. In the late stages of the granuloma phase the cellular reaction tends to extend at the borders and become progressively more mononuclear and less neutrophilic. Lymphocytes and plasma cells are increased and polymorphonuclears and eosinophilic cells tend to diminish (Fig. 4).

In the final, or healing stage, thromboses are not uncommon (Fig. 5); the fibroblasts tend to proliferate in the adventitia and extend into the necrotic wall. There is scar tissue formation with occlusion and narrowing of the lumen. A badly damaged vessel wall is replaced with a fibrous scar. The thickened intima, with narrowing of the lumen, is replaced by connective tissue, and there are characteristic nodular regions of fibrous tissue in the adventitia over the areas where the media has been destroyed. Occasionally aneurysmal dilatations are formed and tend to rupture, and in other areas infarcts are produced in the area of distribution of the thrombosed vessel. Areas of infarction in the peripheral nerves may be manifest by a malalignment of the fibers and destruction of the individual cells making up the peripheral nerve. Indeed, the heart may be involved, and a rather diffuse lymphocytic and plasma cell infiltration may be noted between the destroyed and the infarcted myocardial fibers. The extent of the process may be reflected in the bone marrow which may either or both have undergone a process of infarction and may respond as other tis-

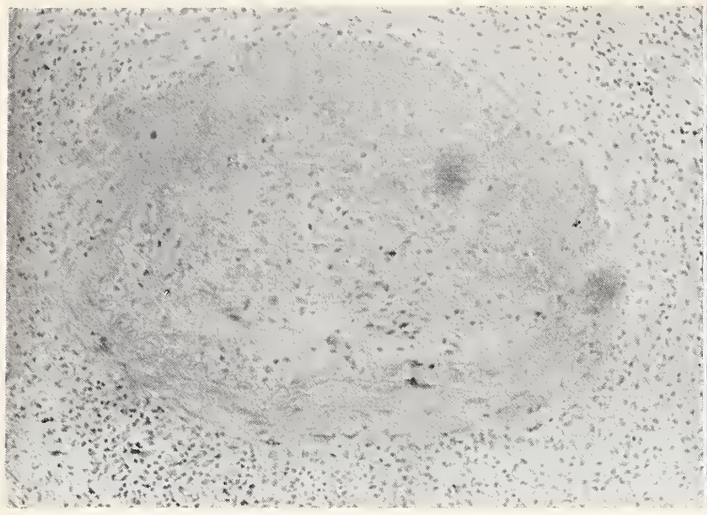

Fig. 5. Case 4, mesenteric artery. In the healing phase there is fibroblastic proliferation, narrowing of the lumen, often thrombosis and diminished cellular infiltrate (x75).

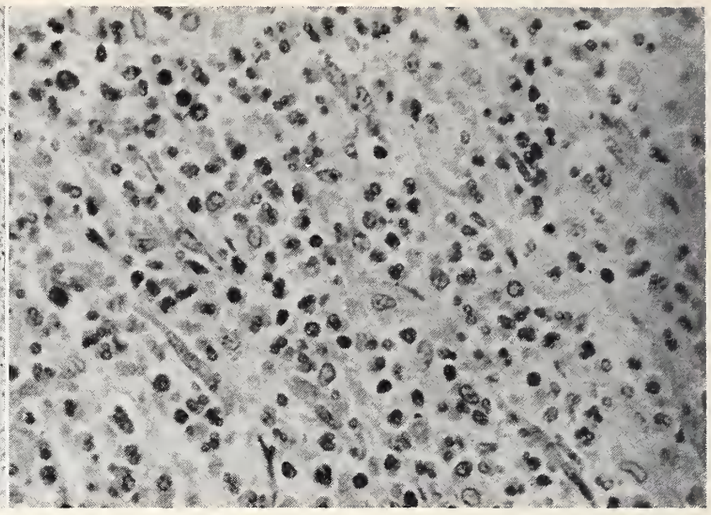

Fig. 6. Case 1, bone marrow. There is a marked eosinophilic infiltrate. In other areas there was necrosis of tissue, apparently the result of infarction (x150).

sues do and be characterized by an intense eosinophilic infiltrate (Fig. 6). The final pathologic diagnosis in all four cases is periarteritis nodosa.

The lesions in these four patients were widely distributed, and lesions were present in the kidneys (four cases), heart (four cases), pancreas (four cases), gastrointestinal tract (three cases), spleen (three cases), liver (two cases), uterus (two cases), lungs (one case), muscles (one case), peripheral nerves (one case), bone marrow (one case), adrenals (one case), and mesenteric arteries (one case) as well as other organs.

Perhaps Drs. McQuiggan and Bailey would conclude this discussion of periarteritis nodosa.

Dr. McQuiggan: Periarteritis nodosa is a disease which is seldom diagnosed during life. The clinical features are so protean that many other diseases may be mimicked.

The lesions may be localized or may be spread throughout the entire vascular tree. It may either progress, as it apparently does in most cases, or it may heal and be discovered years later at the time of necropsy examination. It is because of the widespread character of the lesions that multiple systems may be involved and produce such a wide variety of clinical pictures.

If the kidneys are involved there may be albuminuria and often a rise in the blood pressure. This patient had a low blood pressure but did have some albuminuria. In patients with renal involvement, renal insufficiency and nitrogen retention usually occur in a few months.

In many instances involvement of the gastrointestinal arteries is present. This patient had infarctions of the intestine which probably accounted for the prominent picture of pain at the time of the second admission. Occasionally one of these patients is explored because of the abdominal pains, a biopsy is removed, and the pathologist is able to establish the diagnosis.

In general, the prognosis in these individuals is very poor. A few patients have been reported who have survived for many years, but the average duration of life for those who did not recover has been from six to twelve months.

This patient was in a good state of health for fifteen months following her first period of hospitalization, and as a consequence I do not believe that she had periarteritis nodosa for the seven years of her recurrent attacks of diarrhea, chills, and fever, but that this lesion was probably present only during her final illness.

Dr. Bailey: Much or little can be said regarding the etiology of periarteritis nodosa. Some recent research may aid in determining the etiology of this lesion. Briefly, periarteritis has been produced experimentally in animals sensitized to foreign proteins,[3] in rats made hypertensive[4] and has been found in humans following sulfonamide therapy,[2] especially in those who are clinically sensitive.

The association between periarteritis nodosa and the arteritis accompanying such diseases as disseminated lupus erythematosis, rheumatoid arth-

(Continued on Page 215)

Glaucoma in General Practice

By Ralph O. Rychener, A.B., M.D., F.A.C.S.
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TO THE AVERAGE practitioner of medicine who has no special interest in ophthalmology, chronic or wide angle glaucoma is the vague term of a disease which he hopes will never occur in any of his patients and which he is somewhat skeptical of recognizing if it does. Its diagnosis is highly technical and often difficult even by highly trained specialists, but since glaucoma is responsible for between 30 and 40 per cent of the blindness in this nation today, ophthalmologists must continue to speak about it on all possible occasions, and physicians should consider its presence as a possibility in many of their patients.

Treatment must be instituted early if glaucomatous eyes are to be saved, for vision in eyes blinded by chronic glaucoma is never restored. But figures based on experiences at glaucoma clinics indicate that if the disease is discovered early and proper treatment begun at once, less than 8 per cent of the eyes so affected become blind. Therefore it is important in the middle-aged patient to be suspicious of glaucoma if the patient complains of transient attacks of blurred or smoky vision, of halos or rainbows about lights, or if there is eye pain or blurred vision after movies, in dim lights, or after periods of emotional stress and strain. One should always be particularly suspicious of the individual who has great difficulty with near work despite frequent changes in glasses. If there is a family history of glaucoma, all persons past forty should be suspect. Any patient with one or several symptoms listed above should be referred to an oculist for thorough glaucoma check-up, which includes a testing of visual acuity, an inspection of the size of the pupil and its reaction, a study of the optic nervehead for early or advanced pathologic cupping, a test of the intra-ocular pressure, or so-called tension, by instrumentation, and, most important of all, a thorough study of visual fields, both peripheral and central.

If the diagnosis of chronic glaucoma is once established, the general physician then becomes of inestimable value by corroborating the advice of the ophthalmologist to the patient. Glaucoma can be controlled, not cured. If medical treatment controls the intra-ocular pressure, the patient must use miotics regularly for the rest of his life. If uncontrolled by medical treatment, an operation is indicated, and valuable time must not be lost by delaying the decision. But many patients fail to realize the seriousness of the problem which confronts them, and all of us have had the sad experience of making a diagnosis, instituting treatment which the patient neglected after a few months or a year, and having him turn up for a cataract or some other operation in the hope of relieving his glaucomatous optic atrophy from which he is completely blind. To obviate such tragedies, we now, in our office, give each patient, as soon as the diagnosis of glaucoma is made, a leaflet supplied by the National Society for the Prevention of Blindness.

Rules for Glaucoma Patients

1. Carefully follow your eye physician's instructions and remember especially to return for re-examination at the appointed time.
2. Consult him at once if you see rainbow-colored halos around lights, if the eye becomes painful, or the vision is blurred, or sight impaired in any way at all.
3. Avoid as much as possible excitement, anger, worry, fear or disappointment.
4. Take care that bowel movements are regular.
5. Avoid tight-fitting clothes—a tight collar, corset, or belt.
6. Keep your blood circulation active. If occupation compels you to sit the entire day, take a long but not too tiring walk before and after work.
7. Keep your teeth clean and healthy; pay attention to acute or chronic colds.
8. Limit drinking coffee and tea (not too strong) to one cup a day. Avoid alcoholic drinks.
9. Keep bedroom well ventilated and at moderate temperature; around 70 degrees (Fahrenheit).
10. Avoid dark rooms as much as possible. Go to movies only if your physician permits. Remain at the movies for only one feature, and, if possible, choose subjects that are not depressing or upsetting for you.
11. Do not use any drops or eye washes without consulting your eye physician. They may be very harmful.
12. Have a periodic (yearly) examination of your entire body by your family physician.

We ask the family physician to reiterate the importance of these rules at every possible opportunity.

Thus far we have considered only chronic glaucoma, the insidious disease that comes on so gradually and with such few dramatic symptoms that

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often the process is not recognized until one eye is almost or totally blind. In this type of glaucoma, the general physician is a keen diagnostician if he recognizes, by finger tension or the patient's history, an elevated intra-ocular pressure and gets the patient to special attention in time to save vision. But his responsibility is much more acute and specific in three other types of glaucoma, which are all emergencies in which delay of a few hours to a few days means irretrievable loss of sight.

The first and most important of these is acute glaucoma. Frequently preceded by transient attacks of blurred vision or halos about lights, about which the patient complains little, an acute attack is precipitated by an emotional crisis such as an unexpected death in the family, an elopement or a financial disaster. In these patients there is an anatomical abnormality in the chamber angle of the eye. The angle is narrow; any dilation of the pupil embarrasses the exit of aqueous through the sclero-corneal trabeculae and the canal of Schlemm; the intra-ocular pressure rises rapidly and to fantastic heights, and if relief is not obtained promptly by powerful miotics or surgery, the eye is blinded within a matter of a few hours or, at most, several days. When seen because of pain in the eye, forehead or general trigeminal region, accompanied by blurred or complete loss of vision, the eye ball may be injected although not necessarily so; the anterior chamber is very shallow, the pupil dilated to 4 mm. or larger, inactive and sometimes irregular in outline, and the eye is stony hard to the finger tension test. This patient requires immediate hospitalization and the services of an eye surgeon, for narrow angle glaucoma is ultimately a surgical problem. Iridectomy in this condition gives brilliant results, although if seen in the first few hours, an attempt to abort the attack with strong miotics, the icebag, retrobulbar injection of procaine and the intravenous use of hypertonic solutions is justified. Unfortunately, the clinical picture is not always clean-cut; scleral injection is sometimes mistaken for ciliary injection; the diagnosis is confused with iritis; atropine instead of miotics is prescribed, and the pupil is dilated still further—fuel added to the fire—and by the time the patient is seen by the oculist, the eye is totally and permanently blind. The author is glad to relate that such ophthalmological tragedies no longer occur in the same proportions as of twenty-five years ago, testifying to the ever-increasing improvement of the American man of medicine.

The second group is one of relative rarity, but because the pediatrician or general practitioner always sees these cases first, and since they too are emergencies, it seems pertinent to say just a word about congenital glaucoma. In this disease babies born with normal appearing eyes may in the first few weeks or months of life show a cloudiness of the cornea. This may at first be transient as the intra-ocular pressure rises acutely and then as drainage of aqueous is accomplished, the cornea clears. But soon the edema of the cornea persists, the intra-ocular pressure mounts, the anterior chamber angle widens, the cornea and globe enlarge, and we have ultimately a keratoglobus or buphthalmus with loss of vision. The condition is due to a congenital abnormality of the chamber angle, and surgery, before enlargement of the globe and blindness, is the only recourse. In the primary stage of the disease almost any decompression operation will be effective but goniotomy seems to give the most permanent effect.

The last group which demands your attention is that of traumatic hyphemia. The patient usually suffers a direct trauma to the eyeball, ranging from trivial to severe contusions, which causes a hemorrhage into the anterior chamber. Usually atropine is instilled, the patient cautioned to be quiet, and in three to five days a secondary hemorrhage, more severe than the first, packs the anterior chamber with clotted blood, causing interference in the filtration angle, and the intra-ocular pressure rises acutely with severe pain.

If paracentesis of the cornea is not done within a few hours, bloodstaining of the cornea and optic atrophy due to the secondary glaucoma are the end result. Paracentesis releases the temporary embarrassment of the filtration apparatus, and the use of miotics controls the tension and for some reason seems to prevent further severe hemorrhages. Patients who suffer ocular contusions with hyphemia should be confined strictly to bed, given pilocarpine instead of atropine, and preliminary arrangements consummated to hospitalize them in the care of an eye surgeon should secondary hemorrhage occur.

Summary

1. Certain symptoms are listed which should make the general practitioner suspicious of chronic

(Continued on Page 240)

Antihistaminic Drugs

Oral, Parenteral and Topical Uses in Allergic Diseases

By Samuel J. Levin, M.D., and
Selma S. Moss, M.D.

Detroit, Michigan

BENADRYL and pyribenzamine, the first antihistaminics produced in this country, have been followed by many similar drugs, evolved by pharmaceutical laboratories, each with claims of greater superiority and lesser percentage of side reactions. These compounds (with the exception of thephorine*) are phenolic ethers closely related structurally to benadryl and pyribenzamine.** All are of considerable value for the symptomatic relief of allergic symptoms, particularly hay fever and urticaria. They are of some value, but less so, in asthma, allergic rhinitis, migraine, Ménière's syndrome and the allergic dermatoses.

This entire group of drugs exhibits similar pharmacological properties in varying degree. They all antagonize the physiological effects of histamine in experimental animals. They prevent histamine-induced contraction of the smooth muscle of the bronchi and intestines, and abolish the effect of histamine on blood pressure and capillary permeability. They are all effective in preventing histamine-induced anaphylactic shock and to a lesser degree are effective against other types of induced anaphylaxis.

The use of antihistaminic drugs in the allergic diseases is based upon a theory which is yet to be conclusively proven. This theory postulates the liberation of histamine as a result of the union of the allergen and the sensitized cell in the shock organ. The resultant reaction supposedly produces histamine, plus other physio-chemical changes in the cell itself. Histamine liberation, as a result of the allergic reaction, cannot alone explain all the symptoms of allergy.

Clinically it is thought that the antihistaminic drugs operate by blocking the union of histamine to the sensitized cell. They do not directly neutralize histamine nor prevent its formation.

The failure of these drugs to be universally effective only serves to emphasize the inadequacy of the histamine theory as a complete explanation of the allergic reaction. Nevertheless, these drugs which are able to neutralize the pharmacological effects of histamine have proven themselves of great value in the relief of allergic symptoms in some patients. Our clinical experience with the antihistaminic drugs indicates that they are all effective to some extent and are extremely useful in the treatment of allergic symptoms. Some are more effective than others in a given patient, but none are universally and totally effective in all patients. There is actually no method of determining in advance which is "the best" antihistaminic for any given patient. In prescribing such a drug, one should keep in mind the great individual variation in response. There is also a great variation in the frequency and importance of side reactions.

Side Reactions

The tendency to produce side reactions remains one of the serious disadvantages in the use of all the drugs in this group. The most important side reaction encountered with these drugs is drowsiness, which seems to occur with some of these agents more frequently than with others, and in some patients more than in others, regardless of the drug used.

In our previous study of benadryl, numerous side reactions were listed as follows, and they are met with to some extent in using this entire group of drugs.

Drowsiness	Numbness	Hot flashes
Weakness	Cold extremities	Pallor
Stupor	Jitters	Nausea
Narcolepsy	Collapse	Bad taste
Confusion	Exhaustion	Dry mouth
Somnambulism	Palpitation	Sore tongue
Dizziness	Irritability	Blurred vision
Indigestion	Aggravation of allergic symptoms	

The depressing effect of the antihistaminic drugs in some patients is not always disadvantageous in treating allergic diseases when a sedative effect is desirable, especially for the relief of nighttime symptoms.

In order to overcome the drowsiness, when undesirable, cerebral stimulants such as dextro-amphetamine, desoxyephedrine and caffein can be

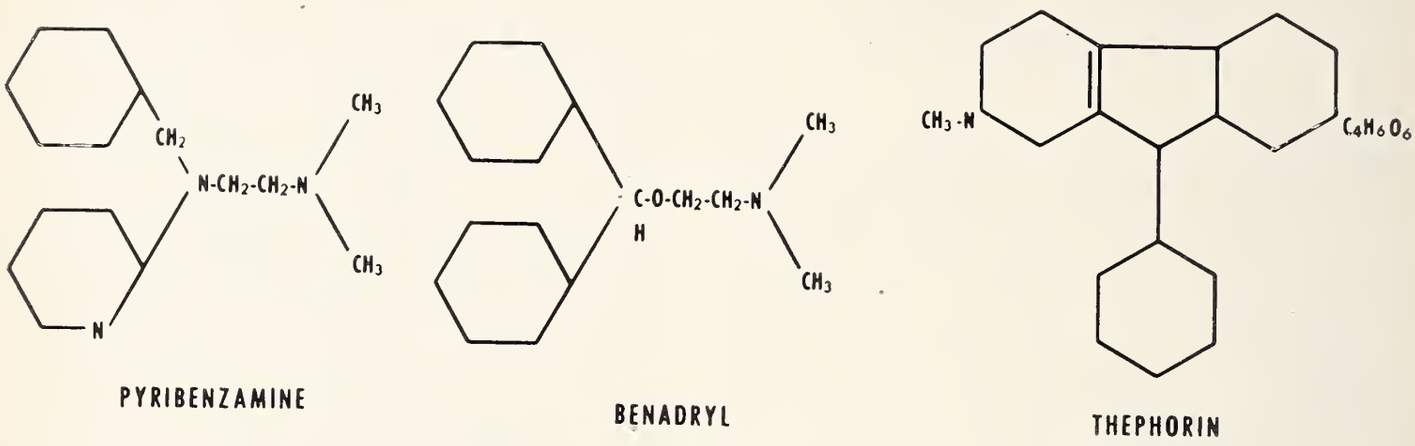
*Hoffmann-La Roche.

**The following chemical compounds are similar in structure to benadryl and pyribenzamine, formulas of which are shown in Figure 1, along with thephorin for comparison.

Antistine	Ciba	Diatrin	Warner
Decapryn	Merrill	Trimeton	Schering
Neo-antergen	Merck	Thenylene	Abbott
Neo-hetramine	Wyeth	Chlor-Trimeton	Schering
Histadyl	Lilly		

prescribed when indicated during the day, especially in adults.

Thephorin is characterized by a structure totally different from the other antihistaminic drugs. Numerous observers have found this drug to possess marked antihistaminic activity and to produce less drowsiness than the older group of antihistaminics. These reports indicate that many of the side effects observed with thephorin are due to its stimulating effect on the central nervous system, resembling similar effects produced by ephedrine and amphetamine.



PYRIBENZAMINE BENADRYL THEPHORIN

Fig. 1

In a series of 170 adult cases we have been able to confirm the fact that thephorin is a very effective antihistaminic agent. The side reactions, when they occur, are chiefly those of central nervous system stimulation. Thephorin in children is also very effective, but in our series of 109 allergic children was found to be more sedative than stimulating, in contradistinction to its action in adult patients.

Approximately 10 per cent of all patients using antihistaminics are forced to discontinue the use of these drugs because of severe side reactions. Side reactions of lesser but sufficient degree to be annoying occur in 35 per cent to 65 per cent of patients using antihistaminic drugs and constitute the greatest disadvantage in the continued use of this method of therapy for the control of allergic symptoms. In a relatively small number of cases a tolerance for an antihistaminic drug can be established by persistent use of small doses so that eventually side reactions do not occur. However, at the same time it has been found that the drug frequently loses its effect after long usage.

In the selection of an antihistaminic drug for any given patient, several considerations should be kept in mind. When a sedative effect is desired, one would prefer benadryl or one of the older antihistaminic agents. It is frequently advisable to order thephorin for daytime use and one of the more sedative antihistaminics for evening and nighttime use. All patients taking antihistaminic drugs should first be given a trial dose in the evening at home, to determine the tendency to side reactions, and should be warned as to their use during the day, especially in regard to the danger of driving an automobile while under their influence.

Hay Fever

There is no doubt as to the great value of these drugs in hay fever, especially the milder forms, and those uncomplicated by asthma. They give relief in about 65 per cent of cases of mild hay fever. They are much less effective in severe cases of hay fever, and for these patients specific desensitization, preferably in advance of the season, remains the method of choice.

These drugs are of value in the control of symptoms while specific desensitization therapy is being instituted, and there is some evidence that small doses of the antihistaminic agents enhance the results of simultaneous specific treatment.

Asthma

There is accumulating evidence that the antihistaminic drugs, although of considerable value for hay fever, do not prevent the development of asthma due to pollen in many of these patients. They are much less effective also for the treatment of asthma than for hay fever. Combinations of the antihistaminic drugs with other medications seem to be more effective than antihistaminics alone. One of the best of such combinations is hydryllin (Searle), containing benadryl and ami-

nophyllin. This drug is also available with racephedrine which may be more useful in some instances. Similar combinations, containing ephedrine, aminophyllin and an antihistaminic, are frequently effective in simple asthma, not complicated by respiratory infections. In the latter type of asthma with infection, frequently termed asthmatic bronchitis, and commonly seen both in adults and children during the winter months, antihistaminic therapy is of practically no value. Here one must rely for symptomatic relief on the older group of anti-allergic drugs, antibiotics and chemotherapy. Several new preparations (orthoxine-Upjohn and nethaphyll-Merrill), containing synthetic ephedrine-like drugs, are of value for some of these patients and have the advantage of not producing side reactions which frequently occur with ephedrine.

Urticaria and the Allergic Dermatoses

All the antihistaminics are of considerable value for this group of patients, but again the results are generally unpredictable and may be disappointing. These drugs may alleviate the pruritus and often give considerable relief. They are especially useful for episodes of short duration but do not obviate the necessity for a thorough search for etiological factors, in the face of persistent symptoms.

Perennial Allergic Rhinitis

The antihistaminics are of very little help in most cases of chronic allergic rhinitis (vasomotor rhinitis). Occasionally patients report definite improvement with some of these medications, but in the opinion of most observers, less than 50 per cent of such cases receive as much as 50 per cent benefit. Thorough study of allergic and other etiological factors, followed by specific avoidance and treatment directed towards the causes, still remains the method of choice in treating this difficult syndrome.

Migraine

On the whole, the antihistaminic drugs are very disappointing for migraine. Benadryl is still one of the best of the group for this purpose, partly because of its strong sedative effect. But clinical trial with several of these agents in turn may be necessary to determine which drug, if any, is of value for relief in any given patient.

Prevention of General Reactions

Most of the drugs of this group can be used to avoid general reactions in patients receiving specific treatment with pollen or other antigens to which they are hypersensitive. We have found that small doses of such drugs have enabled us to administer, without reaction, increasing dosages of such extracts in patients previously very susceptible to reactions. For these patients we have advised one of these drugs to be taken fifteen to twenty minutes prior to the injections. Again only by trial and error can one select "the best" for any given patient.

Parenteral Use of Antihistaminic Drugs

A number of these agents are available in solutions for parenteral administration. We have had clinical experience with the following injectable preparations:

Benadryl	10 mg. per c.c.
Pyribenzamine	25 mg. per c.c.
Thephorin	25 mg. per c.c.
Antistine	50 mg. per c.c.
Histadyl	25 mg. per c.c.

In general, side reactions, if they occur from oral administration of these drugs, are more pronounced with parenteral use. Benadryl is particularly contraindicated parenterally in patients with a tendency to hypertension. We have found several of these drugs of value in preventing general reactions from pollen treatment, when the oral administration of antihistaminics was not too effective or could not be tolerated because of gastrointestinal symptoms. These drugs are also of considerable value in the treatment of general reactions, and are useful for patients having an idiosyncrasy to epinephrine. They may be helpful in status asthmaticus when epinephrine has lost its effect. All such drugs for parenteral use should be tried at first with extreme caution. Severe side effects characterized by dizziness, nausea, severe drowsiness or headache have occurred with all of them in our hands. It is advisable that the first dose of any of these preparations be 1/10 to ¼ the usual therapeutic dose. If no untoward reaction occurs within ten minutes, therapeutic doses can be administered. We have found that antistine is the least potent of these agents for parenteral use, but also the least likely to produce untoward side effects.

All of these injectable antihistaminics are of use in the control of acute urticaria and pruritus

when oral administration is either ineffective or produces gastrointestinal symptoms.

Local Effect of Antihistaminic Ointments

We have had the opportunity of observing the effect of a number of antihistaminic agents incorporated in water-washable creams or ointments for pruritus.

The antihistaminic agents that we have used in this fashion are benadryl, pyribenzamine, histadyl, thephorin, and trimeton maleate. They are all useful for the relief of itching. In our experience thephorin ointment is superior to the other antihistaminic agents for this purpose. Thephorin in ointment form has a temporary burning effect on broken or irritated skin. It should not be used on weeping areas. It is however nonirritating on mucous membranes, and we have found it of great value in the relief of pruritus ani et vulvae.

Our experience with such local application is similar to that with the oral use of these drugs. Some patients respond to one better than another, and only by clinical trial can "the best" one for any individual be determined. The antihistaminic creams or ointments can often be advantageously combined with tar or other medicaments for topical application.

Topical Intra-Nasal and Ocular Uses

A number of antihistaminic agents are available for use in the eye and nose. We have found antistine opthalmic of considerable value for palliative relief of ocular itching. It causes a burning sensation in many patients, forcing its discontinuance. Pyribenzamine nasal solution has also been useful but occasionally produces local irritation and is not tolerated by some patients as well as some of the older decongestants. Again one can only emphasize that the value of the antihistaminics is very unpredictable; they may not be tolerated and are not consistently effective.

Summary

It is important to keep in mind that the antihistaminic drugs, although extremely valuable additions to the measures available for the treatment of allergic diseases, are in no sense constant in their action, even in the same patient. They are especially useful for minor allergic manifestations but may not prevent the development of asthma. The occurrence of side reactions remains an important disadvantage in their use. They are by no means curative. The persistence of allergic symptoms still demands careful and thorough study, by all available methods, of all etiological factors, followed by specific treatment and/or elimination of such causes.

MSMS

RADIO AS A PUBLIC RELATIONS MEDIUM

(Continued from Page 139)

sity of Michigan, Wayne University and the membership of the Michigan State Medical Society.

Professor Waldo Abbot of the University Broadcasting Service supervises the production of the programs which are broadcast as live programs through WUOM in Ann Arbor and WKAR, East Lansing. Transcriptions are made at the time of broadcasts, which in turn are sent to independent stations in many parts of Michigan.

The "Medical Talks" series is available for broadcast on any station through request to John M. Sheldon, M.D., Chairman, Scientific Radio Committee, MSMS, 2020 Olds Tower, Lansing. Local arrangements for broadcast, however, should be completed by local medical societies or local doctors of medicine.

The third category of radio programming and planning is the most important, for it presents the local doctor and his activities to listeners who are his patients. The implementation of locally produced programs is a matter for public relation or radio committees in local medical groups. Once time has been secured, materials and advice are available on the state level, although it will be found that local radio station managers and program directors are willing to co-operate on the production of such presentations over their stations.

Among county medical societies who have achieved notable success through programs of their own planning are those of Muskegon, Washtenaw, Wayne, Bay, Saginaw and Ingham. Additionally, other county groups have aired special programs on different occasions.

At the present time, there are many transcribed radio programs available for use by local organizations. Information will be supplied upon request to the Michigan State Medical Society, 2020 Olds Tower, Lansing, Michigan.

Use of Aureomycin in Common Respiratory Diseases

By Edna W. Schrick, M.D.
Holland, Michigan

IT HAS BEEN the hope of physicians and their patients that some drug would be found to shorten the course of upper respiratory diseases and prevent serious sequelae. This report presents experience in this field with aureomycin.* This antibiotic was used because of its wide anti-infectious spectrum, its ease of administration and its high degree of safety.

In the past, physicians have used sulfadiazine and penicillin as a means of preventing the bacterial complications that may follow respiratory diseases. The widespread use and study of sulfadiazine, however, has shown that it may be too toxic for prophylactic use and that bacterial organisms may become sulfonamide-resistant. Mass penicillin prophylaxis for respiratory diseases has been tried with negative results. When aureomycin was found to be therapeutically effective against primary atypical pneumonia, a respiratory disease which hitherto had no specific treatment, it was decided to try to find aureomycin's role in the treatment of possibly related diseases of the respiratory tract.

The dosage in this experiment, for infants and children up to ten years, was 25 mg. per kilogram of body weight, in twenty-four hours (in four doses); for adults, 250 mg. every six hours (1000 mg. in twenty-four hours).

Several classifications of the respiratory diseases have been made, and I shall follow that of J. H. Dingle[1] with several additions and modifications.

Group I.—The common cold, which is a limited afebrile respiratory illness, characterized by coryza of the eyes and nose and catarrhal infection of the sinuses.

Group II.—Nonbacterial exudative tonsillitis and pharyngitis (probably more frequent than bacterial exudative tonsillitis). This is a disease of sudden onset, with sore throat, fever, headache, anorexia, hoarseness, and cough. If tonsils are present, they are enlarged, injected, and in twenty-four to forty-eight hours are covered with a pin-point, yellowish exudate. If the patient has had his tonsils removed, lymphoid follicles on the posterior pharyngeal wall and nasopharynx are enlarged, reddened, and covered with a similar exudate described on the tonsils. This illness may last several days to several weeks, depending on the individual patient and not apparently on the form of therapy. In numerous cases, the cervical glands become involved, and for this reason alone, it behooves the attending physician to prescribe medication prophylaxis to secondary bacterial invaders.

Group III.—Acute respiratory disease, which has an incubation period of five to six days, followed by fever, chills, headache, and mild sore throat. It is difficult to separate this group from the second group, except by repeated physical examination of the throat. While the throat is sore and generally infected, no exudate develops during the course of this milder illness.

Group IV.—Primary atypical pneumonia, a disease of an insidious onset, with development of malaise, fever, and cough. X-ray findings are characteristic of pneumonitis of lobular or lobar extent.

Group V.—Acute infectious croup, recognized by symptoms of respiratory infection plus hoarseness and a paroxysmal, barking cough. If pulmonary involvement is severe enough, respiration becomes shallow and rapid, and cyanosis may result. This syndrome may be divided into those cases of probable virus origin and those of bacterial causes.

Group VI.—Primary bronchitis, a respiratory disease which begins with a dry cough and may be accompanied by fever. Physical findings are limited to a few coarse râles in the chest, but x-rays of chest show no abnormalities.

Group VII.—Acute otitis media, a disease of the middle ear, which causes earache and fever. Accumulation of infected mucus in the middle ear may lead to pus formation with rupture of the drum and drainage of the purulent material.

In Group I (the common cold) only four cases were treated in this series, due to the fact that the study was done during May, June and July, when the common cold is at low ebb. No complications followed the cold, and the upper respiratory infection seemed to be milder and of shorter duration.

In Group II (nonbacterial exudative tonsillitis and pharyngitis) thirty cases were seen in all stages of development and treated with aureomycin with the following results: Twenty-six cases were afebrile in forty-eight hours and showed improvement, with return to full activity in four days. No complications followed these cases that were treated early in the course of their disease. Two cases lasted a week, with temperature drop-

*Acknowledgment is hereby made to the Lederle Laboratories, Division of American Cyanamid Co., for furnishing the aureomycin used in this study.

ping by lysis, and gradual improvement was not attributed to aureomycin, as both children took it for only two days. The drug produced nausea and vomiting, a side reaction the parents of both children felt was too severe to warrant the continuation of its use. The remaining two cases had been given penicillin before aureomycin was tried, and it required two weeks, one on penicillin and one on aureomycin, before symptoms completely disappeared.

It is my belief to date that this is the antibiotic of choice in treating Group II, for several reasons:

1. Sulfadiazine is more toxic than aureomycin.
2. Aureomycin-resistant strains of organisms are probably less commonly met with than those resistant to penicillin.
3. Aureomycin covers a wider range of susceptible bacterial organisms, including certain rickettsial and viral agents.

In Group III (acute respiratory disease) two children and two adults were treated, and their immediate recovery could be attributed to the natural short course of the disease and to a prevention of complications by the use of aureomycin. All patients reported they felt normal in twenty-four hours after treatment with aureomycin.

In Group IV (primary atypical pneumonia) only one case was treated for five days on aureomycin with clinical improvement as shown by reduced fever and cough, but no x-ray improvement.

In Group V (acute infectious croup) seven cases were studied during a wave of infections of unknown but probable viral etiology. Because no diphtheritic membrane or severe supraglottic edema, due to H. influenzae was seen, it was concluded that these were cases of acute nonbacterial infectious croup, possibly of viral (?) origin. All but one case showed a decrease in fever and cough within twenty-four to thirty-six hours. The one unimproved infant of three months had so much nausea and vomiting on taking aureomycin that it had to be discontinued. In the fall and winter of 1948-49, a penicillin study on prevention of colds in cold-susceptible children was done (100,000 units of penicillin orally twice a day from October to April). During February and March of 1949, there was an epidemic of croup which the daily penicillin did not prevent, and which treatment with penicillin, by mouth and/or intramuscularly, did not cure. The wheezing cough and fever continued for about seven days, until the disease had run its course. Aureomycin was not tried on this series of cases, but when the same symptoms reappeared this summer, aureomycin was used in treatment and helped (six out of seven cases mentioned above) after twenty-four hours of administration.

In Group VI (primary bronchitis) nine patients were given aureomycin. Seven of the nine patients were children from ten months to ten years of age, and two cases were adults. One adult who had one week of penicillin therapy before instituting aureomycin therapy for a seven-day period did not show any improvement. One child did not improve after one week of aureomycin treatment. Six children and one adult did show a striking decrease in coughing within two days and were not coughing one week after onset of illness.

In Group VII (otitis media) two cases of early catarrhal otitis media were treated with aureomycin and showed a complete subsidence of symptoms within twenty-four hours. One adult with purulent otitis media failed to respond to aureomycin, and one child with bilateral otitis media improved after one week of combined therapy with penicillin, sulfadiazine, and aureomycin. These last two cases had had a history of chronic ear troubles, and these present infections were precipitated by swimming.

Probatory Trials

In the course of first experience with a new therapeutic agent, it is customary to make probatory trials upon widely scattered and intractable conditions. For this reason, aureomycin was given to eight patients with varied conditions.

1. A fifty-three-year-old white woman, with laryngitis, fever, and malaise, was cured in two days.
2. A child with chronic rhinitis and sinusitis of one month's duration responded favorably to aureomycin within six days.
3. A three-year-old boy with attacks of bronchial asthma since infancy showed rapid improvement with orthoxine and aureomycin. This patient had attacks of asthma only associated with an upper respiratory infection, and it was my impression, therefore, that he probably had an allergy due to infection. For this reason, orthoxine was given to relax the bronchiolar spasm, and aureomycin, to conquer the infection. This child's mother now wants to have the "gold capsules" on

hand to treat all the child's colds because it helped him so much.

4. A female patient, thirty-eight years of age, with a history of rheumatic aches and pains for six years, remitting and variable in intensity, probably due to a chronic sinusitis, became nauseated and developed a diarrhea after three days of treatment with aureomycin. The diarrhea caused a recurrence of hemorrhoids, a fact which should warn physicians to use aureomycin with caution when treating patients who have hemorrhoids. The patient's rheumatic symptoms subsided so much that she was pleased with the results.

5. A five-year-old girl, suffering from a lung infection caused by a piece of peanut that had been left after bronchoscopy was given, was given aureomycin. The mother reported that the ear, nose and throat specialist who had done the bronchoscopy had stated that the child could take no more penicillin and sulfadiazine. After two days of aureomycin therapy, the parents said the improvement was miraculous. The child's cough and fever subsided, and her appetite returned. Of course, the rest of the peanut was removed, and the child recovered.

6. A seven-year-old boy with greatly enlarged tonsils and adenoids had recurring attacks of upper respiratory infection with fever and tender cervical glands. No permanent improvement could be expected in this case until the tonsils and adenoids were removed, but aureomycin cleared up the infection so that a tonsillectomy and adenoidectomy was possible.

7. A two-year-old female infant, with chronic cystic fibrosis of the pancreas, complicated by pulmonary fibrosis, was among those treated with aureomycin, during the last two respiratory episodes before death. I first saw this child at the age of six months, with a severe upper respiratory infection, fever, cough, and vomiting. Chest x-ray revealed an atelectasis of the right upper lobe. The patient was referred to the pediatric department of the University of Michigan. A diagnosis of chronic cystic fibrosis of the pancreas was made, and a schedule of treatment was started which was followed until the child expired. Penicillin inhalation treatments were given every four hours, and a special diet with pancreatin was used. In spite of the best treatment known today for chronic cystic fibrosis of the pancreas, this patient's course was constantly down-hill. Penicillin was given intramuscularly as well as by inhalation for each respiratory infection, but failed to prevent pulmonary fibrosis and death. Aureomycin was used during the last two febrile respiratory episodes and also failed. It has been reported to me that aureomycin has been successful in similar cases when used in the earlier stages of the disease.

8. In a case of diverticulosis of the colon, aureomycin plus sulfathalidine was used early in an attack of diverticulitis. Sulfathalidine alone and aureomycin alone, and in combination, had been tried previously, but at a late stage in the attack, without noticeable results; but when these two drugs were used early in the attack, in combination, the attack was aborted.

An important use of aureomycin may be in preparing children for tonsillectomies when they have chronically infected tonsils and adenoids as described in this report.

Nausea and vomiting occurred in 11 per cent of cases treated. A certain percentage of sick adults and children vomit. Therefore, the fact that 11 per cent of these patients were nauseated and vomited after taking aureomycin does not necessarily mean that the aureomycin was to blame.

In view of the fact that aureomycin, in this series of sixty cases, apparently shortened the clinical course of the common respiratory diseases and prevented their sequelae, it deserves further consideration and trial.

Reference

1. Dingle, J. H.: J.A.M.A., 136:1084, 1948.

MSMS

PSITTACOSIS TREATED WITH PENICILLIN AND CHLOROMYCETIN

(Continued from Page 183)

present. The infection was contracted from a pet parakeet which, though apparently not previously ill, died shortly thereafter. Diagnosis was verified by complement fixation tests with psittacosis antigen.

It is manifestly impossible to evaluate accurately the relative roles played by penicillin and chloromycetin in this patient's recovery, but it is our impression that the chloromycetin, which was added when her condition was critical and after she had received 2.2 million units of penicillin, was in great measure responsible for her recovery.

Forearm Traction Apparatus for General Practitioner

By R. K. Hart, M.D.,
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and
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FOR THE VARIOUS fractures of the forearm that require sustained traction in the longitudinal axis of the radius or ulna, or both bones, to reduce the fracture and apply a splint or cast, we have used for the past three years a simple effective apparatus and a new device for exerting traction on the fingers and thumb against a fixed and flexed upper arm. The general practitioner who frequently must work without assistance in his office will find this method can produce excellent results.

Caldwell's wire finger trap was a method of maintaining constant traction on the fingers and thumb to reduce Colles fractures or other fractures of the forearm. Carothers and Boyd[2] first used the finger trap on all five digits for reduction of Colles fractures. They gradually reduced the number of digits used until the thumb alone was used with the finger trap against a fixed flexed forearm. Chaffin[3] devised a hand plate with a strap around the wrist and one around the finger to allow pull on the hand. Traction was obtained by a set of pulleys attached to a fixed point and to the distal end of the hand plate.

Our method consists of the use of latex tubing. This tubing is soft, pliable and can be easily rolled onto a test tube and then rolled onto the fingers and thumb. When pulled tautly, the tubing clings tighter to the fingers. As much as 20 pounds of traction for each digit can be exerted upon the tubing.

We use a brass tubular apparatus, as illustrated, to exert and maintain traction upon the fingers and thumb against the fixed flexed upper arm, which is held fixed by the metal plate on one end of the tubular apparatus against the upper arm.

Our method of procedure consists of x-raying the fracture site, and with the patient in a prone position a light short anesthetic may be administered, such as vinethane (rarely have we had to use any anesthetic). During the anesthesia, if there are impactions, they are broken up, and stockingette is applied from the elbow to the proximal interphalangeal joints. The thumb is inserted through an opening made in the side of the stockingette. Five pieces of latex tubing, ten inches long, with a small weight inserted in one end of each, are now rolled onto the thumb and fingers. The

Figures 1, 2 and 3.

metal plate of our traction apparatus is placed against the distal part of the upper arm, and the tubing on one finger at a time is pulled tautly and wound around the rotating traction bar. The small weight in the end of the latex tubing prevents it from unwinding.

The latex tubes are so placed as to maintain ulnar deviation. With traction maintained con-

stant, manual molding or reduction can be accomplished. A circular plaster cast is applied from the distal palmar crease to one inch distal to the elbow. If the Cotton-Loder position of full flexion, ulnar deviation and full pronation is desired, this can be done while the plaster is still wet. As soon as the plaster begins to harden, the latex tubes are rolled off the fingers and thumb. X-rays may be taken with the arm in traction or afterwards. Constant movement of the fingers and thumb is urged to prevent undue constriction of the cast. Seldom has it been necessary to bifurcate these casts.

Summary

1. No assistance is necessary in using this method.

2. The forearm is readily accessible to the application of a cast and for x-raying it.

3. Constant traction is maintained at all times for x-raying wrist and applying cast.

4. One apparatus can be used for all ages and all sizes of arms.

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MSMS

CLINICAL PATHOLOGIC CONFERENCE

(Continued from Page 204)

ritis, rheumatic fever, certain forms of purpura, some types of glomerulonephritis, dermatomyositis, scleroderma, and erythema nodosum, has been suggested. Further, iodine, thiourea and phenobarbital have been suggested as etiologic agents for this type of lesion. In summary, we must suspect not one but many agents as etiologic factors in this type of lesion.

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Use of Thorium-X Alpha Ray in the Treatment of Cutaneous Diseases

A Preliminary Note

By N. E. Aronstam, M.D.
Detroit, Michigan

THE EMPLOYMENT of radioactive agents in skin disorders has been in use for some time. As early as 1930 an article of mine appeared in the *Urologic and Cutaneous Review* entitled "Uranium in the Treatment of Skin Diseases," in which twelve cases were reported. Since that time I have used the uranium salts in various skin lesions with fair success for close to ten years. In 1942 I published another contribution in the above mentioned journal, in which eighty-eight more cases were reported. In 1943 my attention was called to the efficacy of thorium-X alpha ray as a valuable agent of greater radioactivity than uranium. Unfortunately the literature on the subject was very meagre; I had to rely upon my own judgment of its application, taking into consideration the severity of the cases and their chronicity. The strength of the administration varied between 1,000 and 2,000 electrostatic units per 1.0, either in the form of an ointment, alcoholic solution, or a varnish. The types of dermatoses wherein this agent was resorted to consisted of varicose ulcers, erythema perstans, parapsoriasis, lupus erythematosis, various forms of onychopathy, and in acquired pigmented seborrhoeic warts.

Whether this radioactive substance is applicable to many other skin disorders is still a matter of conjecture, but in the types mentioned above it formed a dependable therapeutic procedure. It is too early, therefore, to draw definite conclusions for its more extensive use in many other skin affections. Thus far I have had excellent results in selected cases. This form of treatment constitutes a new departure from the orthodox way of therapy. I am now tabulating all types of dermatoses wherein this radioactive agent has been used, and I am in hope of soon furnishing a more elaborate and comprehensive discussion of the subject.

656 Macabees Bldg.

Detroit Physiological Society

Meeting of November 17, 1949

Bronchopulmonary Mycosis: Observations on Physiologic Aspects of Diagnosis, Treatment and Evaluation of Healing

Simultaneous Primary Occurrence in Four Children and Their Mother with Subsequent Healing by Diffuse Miliary Calcification A Twelve-year Observation

Brenton M. Hamil, M.D.

Department of Pediatrics, Henry Ford Hospital, Detroit, Michigan

The unusual simultaneous primary occurrence of bronchopulmonary mycosis (Aspergillus niger and Monilia pinoyi) in five members of a family group is presented. The literature relating to the history of developing interest in the disease and modern concepts of diagnosis and treatment are reviewed. similar instance has not been reported.

The course of the disease was observed over a period of ten years. Serial blood counts and sedimentation rates are presented in correlation with types of treatment instituted and the interpretation of roentgenograms of the chest during progress of healing.

Presentation of reproductions of roentgenograms for each patient shows the changes from soft fluffy parenchymal densities from apices to bases in the early stage of the disease through a state of apparent condensation of these to a fibrotic appearance and later the deposition of calcium in a few, then all of the nodules as healing progressed; with final condensation of these calcium densities scattered throughout the lungs. The earliest appearance of calcium in the nodules was about three years after intermittent treatment, and within a few months after intensive treatment with iodides, Mapharsen and autogenous vaccines.

The results of serological tests and of skin test reactions to serial increasing dosages of various tuberculin materials and to autogenous and stock vaccines of various fungi and of the bacterial organisms common to the upper respiratory tract, at intervals during progress of healing, are presented. The extent of allergic response to heterologous fungi but more specific response to autogenous organisms is evident.

Successful treatment depends upon early diagnosis and rests chiefly upon administration of adequate amounts of iodides. Potassium iodide can be given safely in massive doses by mouth for long periods without toxic effects. Sodium iodide can be given as 10 per cent solution intravenously, daily for long periods simultaneously with potassium iodide. Ethyl iodide can be given effectively by inhalation for short periods without known toxic or other unfavorable effects other than those common to iodides in general.

Blood counts and sedimentation rates are helpful in evaluating the progress of the patient and the activity of the disease. These data in tuberculosis are similar, nullifying their value in differential diagnosis.

Primary bronchopulmonary mycotic infection with Monilia pinoyi and Aspergillus niger healed completely in the four children observed, leaving scattered dense miliary calcium nodules throughout the lungs. There were no residual symptoms other than spastic paralysis in one patient who developed transverse myelitis during the course of the disease.

* * *

A Method for the Control of Bleeding from Esophageal Varices

T. B. Patton, M.D.

Veterans Hospital, Dearborn

A brief history of the use of tamponade in control of bleeding varices was presented, together with a discussion showing wherein the available methods have been unsatisfactory. A plastic tube with quadruple lumen and with separately inflatable balloons, one on the gastric side and one on the esophageal side, was demonstrated.

A procedure for the care of patients with bleeding varices using this tube was outlined. Results in a series of twenty-five cases were presented.

Emphasis was placed on the fact that this form of treatment is a stop-gap procedure and is considered only an adjunct to some type of shunt procedure which may be performed electively.

Studies on Oxythiamine

CHARLES FROHMAN and HARRY DAY

Wayne University and Indiana University

Oxythiamine is a structural analog of thiamine. To prepare oxythiamine, the primary amino group of thiamine is replaced by a hydroxyl group. Feeding experiments have suggested that oxythiamine is a thiamine antagonist. Rats on a diet adequate in thiamine but with added oxythiamine fail to gain weight while rats on an identical diet with no added oxythiamine gained weight rapidly.

Oxythiamine has a profound effect on the level of pyruvate and lactate in the blood of rats. Four hours after injection with 12 mg. of oxythiamine, the lactate and pyruvate levels in rat blood are increased 500 per cent. This would indicate that oxythiamine inhibits pyruvic dehydrogenase, an enzyme believed to contain thiamine. Oxythiamine inhibits carboxylase, another thiamine-containing enzyme, *in vitro*. Data from *in vitro* studies indicate that oxythiamine competes with thiamine for apocarboxylase. Injections of oxythiamine cause a rise in urinary thiamine. This would indicate that thiamine is displaced from an apoenzyme-coenzyme complex *in vivo*. Rats injected with oxythiamine show several nervous symptoms. All data so far collected indicate that oxythiamine is a potent thiamine antagonist.

Meeting of December 15, 1949

Oxygen Studies on the Arterial Blood of the Newborn Infant—A Preliminary Report

J. C. WATTS, R. M. DAVIS, H. HENDERSON, and D. H. KAUMP

Department of Obstetrics and Gynecology, Providence Hospital, Detroit

Oxygen content and capacity of the umbilical vein blood of newborn infants have been studied in ninety cases, with the purpose of comparing maternal inhalation and block anesthesia, and evaluating, as far as possible, the effects of maternal analgesia and obstetrical complications as they influence asphyxia neo-natorum. The blood samples were collected under oil and assayed for gas content in the manner described by VanSlyke.

A review of the literature reveals interesting animal studies by Snyder and Rosenfeld and similar oxygen measurements by Eastman of Johns Hopkins and Smith of Boston.

It is felt that ninety cases are an insufficient number from which to draw definite conclusions, but that certain impressions seem indicated:

1. The oxygenation of infants born under inhalation and block anesthesia are comparable; however, the respiratory response and general reflex of the infant born under inhalation is slower.

2. A fall in blood pressure under block anesthesia very often results in fetal embarrassment.

3. Obstetrical complications and lengthening of the second stage result in decreased oxygen levels of fetal blood—this seems more so under inhalation.

4. Analgesic agents, moderately used, in block and inhalation do not significantly lower fetal oxygenation.

* * *

The Effect of Growth Preparations on the Hepatic Catalase of Hypophysectomized and Normal Rats

JAMES C. MATHIES and O. H. GAEBLER

Edsel B. Ford Institute for Medical Research, Detroit

Studies of the effect of growth hormone on tissue enzymes were undertaken with the hope that they would throw light upon the mechanism of action of the hormone. Herewith are presented the findings on hepatic catalase. As initial results with this enzyme were encouraging, hematocrit and hemoglobin values in blood were included in later experiments, due to interest in the effects on another, unrelated, though hemin-containing protein.

Five experiments were carried out using mature, normal white rats of two strains and both sexes. In two of these experiments, significant decreases in hepatic catalase followed treatment of the intact animals with growth hormone. The decrease that did occur was independent of hormone dosage, weight gain, method of calculation, and manner of feeding.

Two experiments were carried out using the more responsive, immature, hypophysectomized female rat. In the first experiment, the operated animals were fed *ad lib.*, while in the second experiment, the treated, operated animals were restricted to the food intake of their operated controls. Pair-fed, intact rats were employed as controls in both experiments. The results reveal a highly significant increase in hepatic catalase resulting from hypophysectomy (2-3 fold). Treatment with hormone after hypophysectomy results in a nearer normal catalase content. The low grade anemia resulting from hypophysectomy was made slightly worse when the animals were treated with growth hormone. It would appear that lack of growth hormone is not an important factor in the anemia of hypophysectomy.

* * *

The Use of Water Soluble Contrast Material in Bronchography

N. Shippy

Wayne County General Hospital, Eloise

Visualization of the bronchial tree by means of Diodrast Compound Solution is carried out in order to overcome the tendency of lipiodol to remain in the lung fields. In order to prevent the rapid absorption of the diodrast, 3 per cent by weight carboxymethylcellulose (cellulose gum) is used. This comes in a powdered form and is added directly to the liquid diodrast. Sterilization is accomplished by heating. Morales and Heiwinkel* have made a preliminary report on use of this substance.

We have carried out bronchograms using the following technique: The patient is tested for iodine sensitivity by dropping diodrast into the conjunctival sac. One-half hour before local anesthesia, 1.5 grains of pento barbital sodium and 50 mg. of demerol is given. Using a No. 22 or 23 needle, 2 per cent novocaine is used to infiltrate the skin and area of the cricothyroid membrane. The needle is then pushed through the cricothyroid membrane into the larynx and 2 c.c. of 0.5 per cent pontocaine is injected. This produces cough. When cough subsides, another 2 c.c. is injected. There is rarely cough at this time. The patient is tilted to either side to fill the desired lung or lobe. Fluoroscopy is carried out as an aid to determine pathological changes in the bronchi.

This method offers advantages of (1) no residual contrast material in lung fields, (2) no alveolar filling, (3) ease of administration.

*Morales, O., and Heiwinkel, H.: Viscous water soluble contrast preparation—Preliminary report. Acta Radiologica, 30:257 (Sept. 30) 1948.

OH, FOR SOCIALIZED MEDICINE BALL!

It says here that the boys who play politics have got to be on the ball. I take that to mean no obvious fumbling. Yet there seems to be little else but fumbling in the game with Welfare State.

I refer specifically to the maneuver known as socialized medicine. In the next session of Congress, it promises to stir up a rivalry of Wolverine-Gopher proportions. From where I sit, however, both sides already appear to have lost the Little Brown Jug.

My point is this: Socialized medicine—or compulsory health insurance—is strictly bush-league as a vote-getter. The promise of free spectacles and free false teeth may have had its appeal in Britain—a mere cricket-and-soccer nation. But here in a land of 150,000,000 football-baseball addicts, who cares about free medicine? It amounts to an offer of free peanuts when a season pass is indicated.

What's the matter with our politicians? Do they think that Dr. Fishbein is more popular than Joe DiMaggio?

Compulsory *sports* insurance—that's what the fans would go for!

Consider but a few of its possibilities:

Socialized football, with two guesses for every grandstand quarterback—boy, could you pile up the votes with a campaign promise like that!

Or make it socialized baseball—with every ward-heeler slated for a job in the Yankees' front office. Whammo!

Add socialized bowling, socialized golf—not to mention the million-or-so jobs that could be created in a system of compulsory pari-mutuel insurance. . . .

No doubt about it: the Welfare Staters are fumbling.

There is, of course, the possibility that they're just playing things cozy. Maybe they feel that compulsory sports insurance would be too great a shock to the national economy. On that score, they'd be right—for many sudden changes would certainly be required.

To begin with, the stadium at Ann Arbor would have to be enlarged to accommodate at least 5,000,000—since every Michigan fan would naturally be admitted free. Television sets, for those unable to get to the game, would be provided by the Federal Security Agency. Result—new taxes, another payroll deduction—say, twenty per cent.

At this late date, however, it doesn't seem possible that an added payroll tax (or a threat to the national economy) could halt any vote-getting scheme. At least it couldn't spike such a red hot idea as compulsory sports insurance.

I see no reason, therefore, for the Welfare Staters to be chary. If it's votes they want in 1952, they'll do well to quit fumbling around with socialized medicine, and to come up—pronto—with socialized medicine ball.

—Al Graham, *DAC News,* November, 1949.

Politics, Pill-Peddling and Paper Work

". . . No other profession, in . . . this country, has been brought under such violent attack by those ambitious for political power over it . . ." This single statement by Elmer L. Henderson, M.D., AMA President-elect, would justify the current preoccupation of American doctors with threats of socialized medicine. For any remaining skeptics, a glance at the regrettable status of medical care in England today, or even at medical standards maintained by some of our own federal administrative agencies, should suffice.

Nevertheless, a few doctors have followed political opportunism onto the "Fair Deal" bandwagon. Misleading statements by such individuals constitute a major problem faced by the profession today in fighting political medicine. For example, a prominent news magazine recently quoted a "New York clinician" favoring the proposed compulsory health insurance bill, to the effect that Americans need "a national prepayment system of medical care," and that effective opposition would convert our professional organization into a "political lobby." The implications of this statement in such context thoroughly distort the position of the American medical profession.

We are not opposed to medical prepayment plans, whether national in scope or otherwise. On the contrary, we recognize the need and are actively encouraging such plans. Our fight is with *nationalized and compulsory* medical prepayment plans, political control of medical practice and standards through such plans, and incorporation of such plans into a network of state socialism. The nature of our objectives ridicules any comparison with traditional political lobbies. We can win only that which we already have, the highest standard of medical care in the world. Loss, with resultant emasculation of medical care and progress, needless tax burden, and creation of a fantastic political weapon, would be shared equally by all. We are fighting because we are especially qualified to predict medical consequences, because we resent conversion of medical practice to a routine of politics, pill-peddling and paper work at the whim of federal bureaucracy, and because we believe it fundamental to the democratic concept that one, on his own initiative, must make some individual contribution in value or effort, unless genuinely helpless, to obtain even so necessary a commodity as medical care.

W. E. Barstow M.D.

President, Michigan State Medical Society

President's

Page

Editorial

STATE SOCIALISM

WE HAVE BEEN commenting the past few years upon the trends toward socialism in the United States, and the drive to socialize medicine as one item in the ambitions of the bureaucrats. Some believe this cannot happen in America. The British believed it could not happen to them! Those who listened to the news broadcast over WMAQ on December 20 heard an announcement that the Agricultural Department has established a limit of acreage and production of wheat. Any farmer who produces more than his alloted amount will not receive support benefits. The price of wheat will be held up by the government, and if it falls below a certain amount the farmer will be paid the difference. The amount of wheat produced is to be controlled by the government, and the farmer who produces too much will not receive the price supports, nor can he sell to the government. This also holds for several other commodities.

This sounds to us like complete socialism, and our farmers apparently want it. They had it without too much objection during the depression and during the war years. Now when the whole world is, or should be, trying to get back on a self-contained, self-supporting basis our government has extended socialized agriculture, insofar as several of its basic commodities are concerned.

The medical profession has been fighting this same socializing effort, but when we seem to accomplish something in our defense an attempt is made to punish us. Oscar Ewing's attempt to establish himself in the President's Cabinet as the Secretary of Welfare, including health services, was defeated. Promptly, the FBI was instructed to investigate medical societies and medical service plans, trying to find some loophole by which the profession could be discredited or brought to trial under the Sherman Anti-Trust Act.

Just recently committees in Congress announced that they are investigating the "Medical Lobby" against socialized medicine. Incidentally, they promise also to investigate the lobby *for* socialized medicine. We *hope* they do. If they do, we feel some bureaucratic fingers will be burned. Ex-Congressman Harness in July, 1947, charged that the government bureaucracies in the Legislative branch had spent $75,000,000.00 the year before in propaganda for socialized medicine. Our Congressman told us just recently that the government is spending this amount of money every year for the same purpose. We pray the mediocre two and one-half million which the American Medical Association is spending in fighting this seventy-five million dollar propaganda will achieve better results.

RHEUMATIC FEVER CONTROL A PUBLIC SERVICE

THE MICHIGAN State Medical Society for several years has been proving to itself, and to the interested public, that a Medical Society can render an outstanding public service in the matter of improving health conditions and making them available.

We have established Centers for rheumatic fever diagnoses throughout the state. Doctors are urged to send their undecided cases to the centers for thorough examination and diagnosis. Consultants have been appointed from among the doctors in the community who had special knowledge of pediatrics, cardiology, otolarnygology and roentgenology. Children receive a thorough examination by each one. Necessary laboratory studies are made; EKG examinations, x-rays and pathological reports. The consultants then make a diagnosis from the complete findings and send it to the family physician who had referred the case to the Center. *No attempt is made at treatment,* but advice on treatment is given to the family doctor, if wished. Since following this method throughout the state, four to five thousand children have been examined, many diagnoses of rheumatic fever have been made and many more diagnoses by the family doctor without the aid of the Center, have been stimulated through increased attention to the disease.

This is a service financed from three voluntary organizations. The work is done by members of the Michigan State Medical Society—also a voluntary organization—in the public service. Our Rheumatic Fever Program proves that the medical profession of Michigan is interested, and willing to

assume leadership in all the health problems of the public—preventive as well as curative.

Medicine in recent years lost its active participation in the treatment of tuberculosis. Government has taken mental hygiene, the care of the insane, and has largely taken over the care of venereal disease—all of these without much opposition on the part of the profession.

Michigan medicine is now making an attempt to retain rheumatic fever of childhood to the profession. Where the co-operation has been even moderate the results have been outstanding. If we could have complete co-operation throughout the state, the results would be a dramatic landmark.

Some of our Members have objected to this program, claiming it was or might lead to socialized or government medicine. How wrong! This program was established for two reasons: First, to render a public service to a considerable number of ailing persons, and, secondly, to prove that such a service can be done by private medicine. The programs which are now covering tuberculosis, mental hygiene, maternal health and venereal disease are definitely political medicine. They are directed and sponsored by government agencies, and we believe government would be only too happy to take over rheumatic fever.

In the background, but coming rapidly forward, is the program to control the diagnosis and treatment of cancer, of epilepsy, of arthritis and rheumatism; of heart disease and of spastic paralysis. Before long these fields in the practice of medicine may also disappear from our direct responsibility—unless we can prove that organized medicine is equal or superior in its benefits to government medicine.

We doctors have been accused recently and frequently of being behind the times in taking advantage of new medical knowledge. Michigan's work in rheumatic fever belies that charge. An extension of that work to include the active support of all of our members would set an example in medical progress never yet attained.

MICHIGAN HEART ASSOCIATION GOES FORWARD

THE MICHIGAN Heart Association, through its president, W. B. Cooksey, M.D., Detroit, has announced a new service to physicians which began on January 9, 1950. This consists of a public information program designed to reveal to the laity the activities, projects and plans of The Michigan Heart Association. Part of this program will include information on the Rheumatic Fever Consultation and Diagnostic Centers of the Michigan State Medical Society.

To implement this program, the full-time services of Mrs. Martha Mueller have been obtained as Public Information Representative. Mrs. Mueller is well qualified by training and experience to serve in this field. She received her M.A. degree in Educational Guidance from Michigan State College and has been active in newspaper and radio work for a number of years.

A strong program is now being developed which will include not only the use of the regular avenues of communication, but, in addition, work in connection with the schools, various voluntary lay organizations and women's groups throughout the state.

PUBLIC RELATIONS

ONE of our County Medical Societies, in trying to circumvent criticism from various sources, conducted a panel discussion in January on "The Relations of the Medical Profession to the Public." Present were a newspaper editor, the publisher, the Secretary of the Michigan State Medical Society, and the Superintendent of Schools. The educator criticized the profession seriously because of shortcomings encountered by the school authorities. He told of many instances of children needing "medical (?) attention" in order to do well in school, and inability to get, not the attention but the remedies prescribed. The outstanding case cited was a child with thyroid deficiency who was seen and examined by a doctor without charge, and willingly, but the prescription called for $3.00 worth of thyroid substance which the family was unable to buy. The school had no funds, and the opinion was voiced that "The medical profession should make some arrangement to supply this deficiency, otherwise there would probably be necessity of government intervention."

Other criticisms made by this same panel member would seem to show that even the well-educated layman is inclined to blame the medical profession for *all* shortcomings having to do with health. He mentioned children in school without teeth or dentures, and children with insufficient nutrition. Educators desire that every school child

(Continued on Page 232)

Serving with Easter Seals

Doctor, once again please note the cover page of this journal. It is just another evidence of the deep-rooted mutual interests of the Michigan State Medical Society and the Michigan Society for Crippled Children and Adults, Inc. Together, over the years, they have worked in the cause of good medical practice and health, administered by those best qualified and in recognition of privileges and

Although he wears braces on both legs, they don't stop six-year-old Russell from playing marbles as he lines up a sure shot. Recreation is one of the important direct services provided when you use Easter Seals.

prerogatives. Our very existence represents a bulwark of hope and strength for the crippled and afflicted of Michigan who must be helped to help themselves.

What are Easter Seals? They are a dignified medium, a symbol, so to speak, whereby resources are made available for the conduct of a minimum diversified program, but they do more than just raise money—affording everyone an opportunity to contribute in any amount no matter how small. They also are a means of educating the public, causing our citizens to think in terms of good health and prevention. They are the means of renewing services for neglected cases and a reporting of new cases resulting in proper medical care.

Much could be said about the program of the Michigan Society and its need, but perhaps a report of stewardship is in order and will suffice at this time.

The following brief statements are taken from the recent annual report of the society's activities:

1. Through an excellent, perfected plan of cooperation with the Michigan State Medical Society, thirty Rheumatic Fever Centers are now established. Up to the present time, this program has been financed solely by the Michigan Society for Crippled Children and Adults, Inc., to the extent of over $45,000.

2. A total of nine Cerebral Palsy Clinics were conducted throughout the year, at which 268 children were examined and prescribed for by the Society's consultant, Dr. Meyer Perlstein of Chicago. The cost of the clinics is paid by the Society. Never is a clinic conducted without the approval, good will, and support of the local medical society, and treatment is left with the referring physician. Doctor-patient relationships are strictly maintained.

3. The Society maintains a staff of seven occupational therapists who provide therapy and craft work for the homebound, both from a therapeutic and craft value point of view. A total of 566 homebound clients were served last year at an annual average cost of $50.02. The total cost was $28,310.80. For those who can be benefited by medical practice and therapy, close relationship is maintained with the family physician. This service is for the severely handicapped, who, in the main, are confined to their homes. The articles which they make are sold by the Society at its sales outlets, and all profits are returned to the homebound clients.

4. The Society, together with its Detroit chapter and to the extent of $20,000, has supported the Epileptic Clinic, located in Detroit, which clinic, of course, has the approval of the medical profession and is an aid to doctors as well as patients.

5. Recreational activities including summer camping with specialized educational and therapeutic services employed at a cost of $6,000.

6. Scholarship grants, not loans, were afforded nineteen students at a cost of over $3,000. They are teachers and therapists trained in the newer techniques to serve not only the orthopedic patient but also the deaf and hard of hearing, blind and partially seeing, speech defectives and those suffering from convulsive disorders. The Society's scholarship policy is a recruitment program due to the drastic shortage of technicians in these specialized fields.

7. A study of local services made possible by Easter Seal monies show that for individual case care on a local level, a total of $100,293.45 was

expended and which provided a great variety of necessary services, ranging from expert examinations to as near complete rehabilitation as possible. Only to mention a few of the many in-between services—transportation, recreation, medical care, hospitalization, prosthesis, special equipment, braces, wheel chairs, crutches, physical therapy, occupational therapy, bedside instruction.

8. The Society concerned itself in matters of legislation and played an important part in thwarting an attempt to abolish our Michigan Crippled Children Commission. It helped in the matter of legislation extending the education of the physically handicapped which resulted in more adequate finances and broadening the service so that a larger number may be accommodated.

Little Judy shows this giant Peter Rabbit how to paste an Easter Seal on the back of an envelope. You can help the thousands of crippled children throughout the nation just like Judy by putting an Easter Seal on every letter you write.

9. The Society's official publication, *News and Notes,* was prepared and mailed to 6,000 persons six times throughout the year. This publication publicizes new developments in the work and relays services that have proven practical for the benefit of all.

10. In the performance of its work, the limited staff of the Michigan Society traveled a total of 84,089 miles in Michigan, working with doctors nurses, hospitals, schools, state and local health and welfare agencies.

Among services to the physically handicapped, the above are only a few of the highlights taken from the Society's annual report, but it is sufficient to indicate greater and better support for the 1950 Easter Seals.

Judy's wide smile expresses her happiness over the progress she is making in learning how to walk. The skis she is using help her retain balance while she pulls one foot forward and then the other. Skis are just one of the many types of equipment that your use of Easter Seals provides.

We need your help; we have not reached the limit of our helpfulness. We are not content; much has been accomplished, but much more remains to be done. We have a tremendous knowledge and understanding of the sick and their needs. As we grow, we learn; we realize more and more the extent of the need. Easter Seals again must come to the rescue. You will help, won't you?

Michigan Tumor Registry

The Michigan Tumor Registry, sponsored by the Michigan Pathological Society and other recognized organizations, officially opened on January 1, 1950, at the Detroit Cancer Center. It will service the entire state.

Plans, first conceived by Dr. A. James French of the Department of Pathology of the University of Michigan School of Medicine, for establishing such a registry have been under consideration in the Michigan Pathological Society for more than two years. Doctor French reported to the Society in 1947 on information gained from his rich experiences as consultant at the Army Institute of Pathology in Washington, D. C. A committee was appointed to review the proposal and after study of state and national registries, the committee recommended the establishment of a tumor registry for Michigan under auspices of the Michigan Pathological Society. This action was enthusiastically received and approved by the Society.

Two types of tumor registries are found in the United States, i.e., those on a state level and the national.

State tumor registries have been operating in the United States since 1909, when the Pennsylvania State Tumor Registry was established. Evolving from this state plan, with modifications, tumor registries are now an integral part of the Cancer Control Program in several states, the more important being the Registries of New York, Connecticut, Massachusetts, New Jersey, Washington and Oregon.

Three basic plans have been utilized by the various states since the Pennsylvania Plan was inaugurated.

1. The Connecticut Plan accumulates data through hospitals and tumor clinics whose data are abstracted and centralized for statistical analysis. Abstracts of the original data and case follow-ups are functions of the hospital staff. Co-ordination of the program, centralization of records, and statistical analysis tend to be centered in the State Health Department's Cancer Control and Vital Statistics Divisions.

2. In New York and Massachusetts data are accumulated by direct reporting of cases by practicing physicians under a mandate of Legislative act or Board of Health regulation.

3. The Pennsylvania, later New Jersey and more recently Washington and Oregon, Plan is that of tissue section and case history registration by practicing pathologists.

The National program has progressively developed at the Armed Forces Institute of Pathology in Washington, D. C., since the first registry was established there in 1922.

The National Research Council and Specialty Societies of Medicine sponsor registries which are housed at the Armed Forces Institute of Pathology in Washington, D. C. The American Association of Ophthalmology and Otolaryngology formed the first registry, at the then Army Medical Museum, in 1922. This, the oldest of the registries, now has more than 20,000 accessions.

In 1925, the American Association of Pathologists and Bacteriologists established the Registry of Tumors of the Lymphatic System, and in 1927, the Registry of the American Urology Association began to collect tumors of the urinary bladder. During the period from 1933-1945, eleven other registries were formed, including Dental and Oral, Otolaryngology, General Tumors, Dermal, Renal, Thoracic Tumors, Neuropathology, Orthopedic, Prostatic Tumors, Veterinary Pathology, and Gerontology. All of these registries are sponsored by national societies. Approximately 50,000 accessions are included in the combined registries collection. The latest is the Roentgenology Registry which was formed in 1947.

The Michigan Tumor Registry which evolved from the study of national and state plans by the Michigan Pathological Society has been approved and is now sponsored by the Detroit Institute of Cancer Research, the Cancer Control Committee of the Michigan State Medical Society, the American Cancer Society, Southeastern Michigan Division, and the Michigan Cancer Foundation. It will be housed in the Detroit Cancer Center, 4811 John R. Street, Detroit, and will be conducted by an administrative committee composed of four members from the Michigan Pathological Society, the Director of the Detroit Institute of Cancer Research, the Executive Director of the American

Cancer Society, Southeastern Michigan Division, and a member appointed from the Cancer Control Committee of the Michigan State Medical Society. The present committee members are Dr. O. A. Brines, Dr. Frank W. Hartman, Dr. A. James French, Dr. William L. Simpson, and Dr. D. C. Beaver, Chairman. Representatives from the Cancer Control Committee and the American Cancer Society are as yet unnamed. Much credit is due the sponsoring organizations, for without their support the registry program as developed would have failed.

The organization is unique in that its financial support has come entirely from a nongovernmental agency, the Michigan Cancer Foundation, the president of which is Mr. Oscar Webber of Detroit. It is also unique in being sponsored and supported only by societies representing the practicing physicians of the state, or voluntary health organizations.

The Michigan Tumor Registry will be developed entirely on a voluntary basis and will have no part in a compulsory program for the reporting and following cancer cases as is done in a few states. Its direct support will come from the practicing pathologists of the state; however, it is hoped that all practicing physicians of the state will have an interest and support the Registry through the local pathologists. The pathologists will register those cases of benign and malignant tumors and related diseases which they, and the physicians they serve, consider worthy of registration. Eventually it may be extended to the voluntary registration of all cases of malignant diseases. To register a tumor the pathologist will submit portions of the tumor or microscopic slides prepared from it, together with x-ray plates and a clinical history of the case on a prepared form. Microscopic slides from the tumor will be studied by a designated pathologist or by a Board of Consultants. In the problem cases, opinions may be sought from specialists in the various fields of pathology, if so desired, by the Board of Consultants. The pathologist who originally submitted the material, and indirectly the physician in charge of the patient, will benefit from opinions thus secured.

The Registry will strive to furnish prepared study sets of microscopic slides to those physicians who for any reason are interested in postgraduate training in pathology. This will be especially useful to those preparing for specialty Board examinations in the various fields of medical practice and to resident physicians in training for the medical specialties.

The program will further supply data on the incidence of various types of malignant diseases, the evaluation of methods of treatment, and such matters which will assist the medical profession in reduction of mortality rates attributable to malignant diseases. The Detroit Institute of Cancer Research may also be in position to use the data in statistical and related research problems. It may also be applied to lay education.

It is hoped that the work of the Registry will be eventually under the guidance of a part-time or full-time director, who will develop his talents in the fields of diagnosis and research as they relate to malignant diseases.

The Registry is not to be developed as a diagnostic center of malignant diseases. This prerogative has been rightly reserved for the practicing pathologists. The Registry, however, will act in a consulting capacity whenever requested to do so by the practicing pathologists of the state. The main objectives of the Registry may be summed up as these: (1) consultation service to pathologists, thus benefiting the pathologist and indirectly the individual patient and the practicing physician; (2) educational, on a professional level for postgraduate study in pathology and on a lay level through statistical evaluation of the material as it applies to early diagnosis, approved types of treatment; (3) clinical correlation, to assist practicing physicians to evaluate exact pertinent statistical data on malignant diseases as found in Michigan and assist them in applying this to their medical practice, and (4) research, to assist the Detroit Institute of Cancer Research in obtaining material on malignant diseases for study.

Michigan Industrial Health Day

Sponsors

Michigan Association of Industrial Physicians and Surgeons
Michigan State Medical Society's Committee on Industrial Health
Medical School of the University of Michigan
School of Public Health, University of Michigan
Wayne University College of Medicine
Division of Industrial Health of the Michigan Health Department

ANNUAL MEETING OF THE MICHIGAN ASSOCIATION OF INDUSTRIAL PHYSICIANS AND SURGEONS

Wednesday, March 29, 1950

School of Public Health Auditorium
University of Michigan, Ann Arbor

C. C. Sturgis, M.D.

Morning Session

Chairman, Max R. Burnell, M.D.

A.M.
9:00 **"Medical Problems of the Older Age Group in Industry"**

This will be a panel discussion dealing with the problems of *employing* and *continuing* the employment of individuals in the older age group with special emphasis on the degenerative diseases, and emphasizing the value of job placement in relation to employment.

Panel—Cyrus C. Sturgis, M.D., Ann Arbor, *Moderator*
John G. Bielawski, M.D., Detroit
Jerome W. Conn, M.D., Ann Arbor
Edwin DeJongh, M.D., Detroit
Sibley W. Hoobler, M.D., Ann Arbor
Gordon B. Myers, M.D., Detroit
H. Marvin Pollard, M.D., Ann Arbor
William D. Robinson, M.D., Ann Arbor
Raymond W. Waggoner, M.D., Ann Arbor

* * *

Luncheon Hour
12:00 to 1:30 P.M.
NO LUNCHEON MEETING

Individual luncheons may be obtained either at the Woman's League or the Michigan Union.

* * *

Carl A. Badgley, M.D.

Afternoon Session

Chairman, Joseph L. Zemens, M.D., Detroit

P.M.
2:00 **"Ambulatory Surgery in Industry"**

This will be a panel discussion with special emphasis on the everyday type of surgical problem which confronts the Industrial Physician, such as:

Tendon injuries
Severe contusions with soft tissue injury
Treatment of sprained ankles without fractures
Knee injuries
Low back pain
Fractures of the hand and wrist
Skin grafting small areas

Panel—Carl E. Badgley, M.D., Ann Arbor, *Moderator*
George J. Curry, M.D., Flint
Robert H. Denham, M.D., Grand Rapids
Clifford H. Keene, M.D., Ypsilanti
Donald F. Kudner, M.D., Jackson
Sylvester, J. O'Connor, M.D., Ann Arbor
Grover C. Penberthy, M.D., Detroit

* * *

4:30 Annual business meeting of the Michigan Association of Industrial Physicians and Surgeons

Evening Session

6:00 Social Hour—Allenel Hotel

6:30 Dinner—Allenel Hotel

Toastmaster—E. A. Irvin, M.D., Detroit, Vice President American Association of Industrial Physicians and Surgeons

Guest of Honor—Alfred H. Whittaker, M.D., Detroit, President of American Association of Industrial Physicians and Surgeons

Topic: "Old Age—An American Problem"

Guest Speaker—John A. Schindler, M.D., Monroe, Wisconsin, Department of Internal Medicine, The Monroe Clinic

* * *

A. H. Whittaker, M.D.

TELEPHONE NUMBERS

School of Public Health Auditorium
Ann Arbor 3-1511, Ext. 2360 (9:30 a.m.-5:00 p.m.).

Allenel Hotel
Ann Arbor 3-4241 (evening).

John A. Schindler, M.D.

COMMITTEE ON ARRANGEMENTS AND PROGRAM

Co-Chairmen

Max R. Burnell, M.D., Detroit, Chairman, Industrial Health Committee, Michigan State Medical Society

Joseph L. Zemens, M.D., Detroit, President, Michigan Association of Industrial Physicians & Surgeons

T. I. Boileau, M.D., Detroit
W. A. Dawson, M.D., Detroit
E. A. Irvin, M.D., Detroit
J. M. Lynch, M.D., Lansing
C. D. Selby, M.D., Ann Arbor

Max R. Burnell, M.D.

E. A. Irvin, M.D.

Joseph L. Zemens, M.D.

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

INFANT DIARRHEA

Bacteriologists in the Laboratories of the Michigan Department of Health have recently identified a bacterium from cases of infant diarrhea which may prove to be one of the causative agents of this disease.

The organism, which is a special type of *E. coli,* defies recognition by ordinary methods. This is the first time it has been found in the United States. It is an organism which British and Scotch workers feel is a possible cause of infant diarrhea. In Scotland, it was found in 90 per cent of one series of cases of diarrhea in infants, but was not found in the stools of normal infants nor in those of adults. The identical culture was found in outbreaks of infant diarrhea in England.

The organism has been found in many stool specimens submitted from recent Michigan outbreaks of diarrhea in the newborn.

The isolations were made in the Michigan Department of Health Laboratories by Dr. William Ferguson, coordinating bacteriologist and chairman of the Department's Research Committee.

The identifications were made by methods which are practically unknown in this country but which Dr. Ferguson learned in 1948 when he studied in the Danish Serum Institute in Copenhagen under a $1500 fellowship granted him by the Commonwealth Fund of New York. In the Institute, while he was studying methods which would help Michigan doctors and hospital authorities to combat dysentery and similar ailments, he learned from Dr. Fritz Kauffmann, chief of the World Health Organization Salmonella Center, the complicated data and methods necessary for the recognition of the *E. coli* organism.

European scientists concur with Michigan Department of Health Laboratories in finding that the organism in many cases can be destroyed by certain of the new drugs. Dr. Russell Gottshall, laboratory biochemist, has discovered that sulfathiazol will destroy the bacteria in a test tube.

Dr. Ferguson and the other scientists in the Michigan Department of Health are hard at work on proving whether the organism produces the infant diarrhea which has caused many baby deaths in Michigan and on methods of combatting it.

If the Department work shows the organism to be the cause of outbreaks here, and if antibiotic therapy is successful, this is an outstanding contribution to the safety of infants and to the world of medicine.

* * *

UNIVERSAL BIRTH REGISTRATION

Every baby born in Michigan now gets a birth certificate number which applies to him alone and which will not be duplicated during his lifetime.

Michigan, together with other states in the nation, on January 1 began a new system of numbering birth registrations that may become international.

The numbering system is planned to cut down on the assortment of numbers that an individual accumulates on official documents during his lifetime. The first birth registration number to be assigned in Michigan under the new numbering plan was 121-50-000001. In that eleven digit sequence, the first "1" in 121 means the United States; "21" refers to Michigan's alphabetical position in the list of states; "50" designates 1950 as the year of birth and the last block of six figures is reserved for the registration serial number of the birth certificate.

The second number assigned in Michigan was 121-50-000002, and so on. Next year, the first number will be 121-51-000001. The six digits in the last section are necessary because Michigan and some of the larger states each year record more than 100,000 births.

The number is assigned to the original birth certificate after it arrives in the Division of Disease Control, Records and Statistics of the Michigan Department of Health.

The new procedure is intended to simplify the identifying and registering of each individual on official documents. The national office of Vital Statistics which originated the idea thinks that eventually the birth number will be acceptable for all purpose identification—on marriage and death certificates, military records, and various other types of reports and applications handled by governmental agencies—perhaps even social security.

* * *

SYPHILIS PREVENTION

The prevention of congenital syphilis is being given special attention in Michigan during February, National Social Hygiene Month.

"Protect Our Children—Strike Out Syphilis" is the theme for the month in the State. Special emphasis is being placed on the state's prenatal examination law as a major weapon against congenital syphilis. Stress is also being placed on the necessity for earlier medical care during pregnancy.

Approximately 500 cases of congenital syphilis are found in Michigan each year.

During the period January 1, 1948, to October 30, 1948, there were 125,672 births recorded in Michigan. On 1,712, or 1.36 per cent, of these birth records it is stated that no prenatal blood test was made. On 9,473, or 7.54 per cent, it was not stated (as is required) whether or not a blood test was made. Thus, in spite of the prenatal examination law, in 9 out of every 100 births, either the blood test was not made or, if made, was not reported.

* * *

With the increase in the cost of both fresh and canned citrus fruits, Michigan homemakers will be especially interested in a new pamphlet prepared by the Michigan Department of Health—*Vitamin C Calendar for Michigan.*

(Continued on Page 230)

The Bettman Archive

The nausea, vomiting and dizziness of motion sickness may be prevented or relieved, in a high percentage of cases, with Dramamine* (brand of dimenhydrinate).

DRAMAMINE for the Prevention and Treatment of Motion Sickness.

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DETROIT'S MOST CORRECT ADDRESS

(Continued from Page 228)

This calendar shows best vitamin C sources among foods grown in Michigan, according to the months in which the foods are available, and gives some facts about vitamin C and the preparation of foods containing it. The pamphlet may be obtained from the local health departments or from the Michigan Department of Health, Lansing 4, Michigan.

* * *

One phase of the Department's poliomyelitis research is reported in a paper on "Evaluation of Autolyzed Mouse Brain Tissue Method for Isolation and Adaptation of Poliomyelitis Virus," by Serge Lensen, Ph.D.; Max Stebbins, M.S.; and Lenora Jones, M.S., of the Department's laboratories, published in the November issue of the *Proceedings of the Society for Experimental Biology and Medicine.*

* * *

National Negro Health Week will be observed April 2 to 9, 1950. The objective this year is the evaluation of the National Negro Health week program of the past years. A suggested day by day schedule for the week has been set up. Additional information may be secured from the Public Health Service, Federal Security Agency, Washington, D. C.

* * *

Two new film strips on the problems created in an older child by the arrival of the new baby have been added to the Film Loan Library of the Michigan Department of Health.

"David's Bad Day" is a 36-frame silent 35mm. film strip showing the personality problems caused by the advent of the new baby and how the parents recognized and solved them.

"David and His Family" is a 30-frame silent 35 mm. film strip which tells the story of David's life at home with the new brother and how he adjusts to the new situations. Both have text guides.

* * *

Cases of rabies are increasing among Michigan animals. The Michigan Department of Health, along with the local health departments, is urging local rabies control programs including the vaccination of all dogs, the impounding of strays and the quarantine of infected areas. In some areas, local veterinarians are offering reduced rates for the vaccination of animals.

* * *

Michigan has had no new cases of typhoid fever due to a public water supply in the past fifteen years and there were only fifty cases and four deaths from typhoid fever in 1948 in comparison with 424 cases and seventy-five deaths in 1931.

There are now 254 known carriers in the state, all of whom are under the close supervision of health departments to make sure that they do not engage in occupations where they might transmit their infection to others. In the seventeen-year search for carriers in Michigan, a total of 533 carriers have been found.

(Continued on Page 232)

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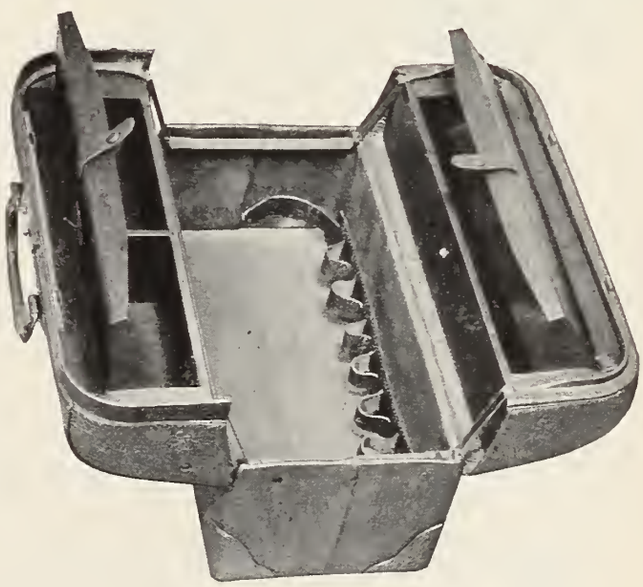

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(Continued from Page 230)

The 1950 revision of "Michigan Regulations for the Control of Communicable Diseases" has just been printed. Major changes are in scarlet fever and streptococcal infections, poliomyelitis, tuberculosis and epidemic diarrhea control. Copies of the "Little Red Book" may be obtained from local full-time health departments.

Physicians in areas without the services of full-time local health departments may obtain the book by writing to the Division of Disease Control, Records and Statistics, Michigan Department of Health, Lansing 4.

* * *

The following laboratory has recently qualified for the performance of enteric examinations: Borgess Hospital, 1521 Gull Road, Kalamazoo, Michigan.

* * *

Rogelio N. Belova, M.D., Director of the Division of Laboratories, Department of Health, Manila, completed three weeks' study in the Laboratories of the Department in January.

PUBLIC RELATIONS

(Continued from Page 221)

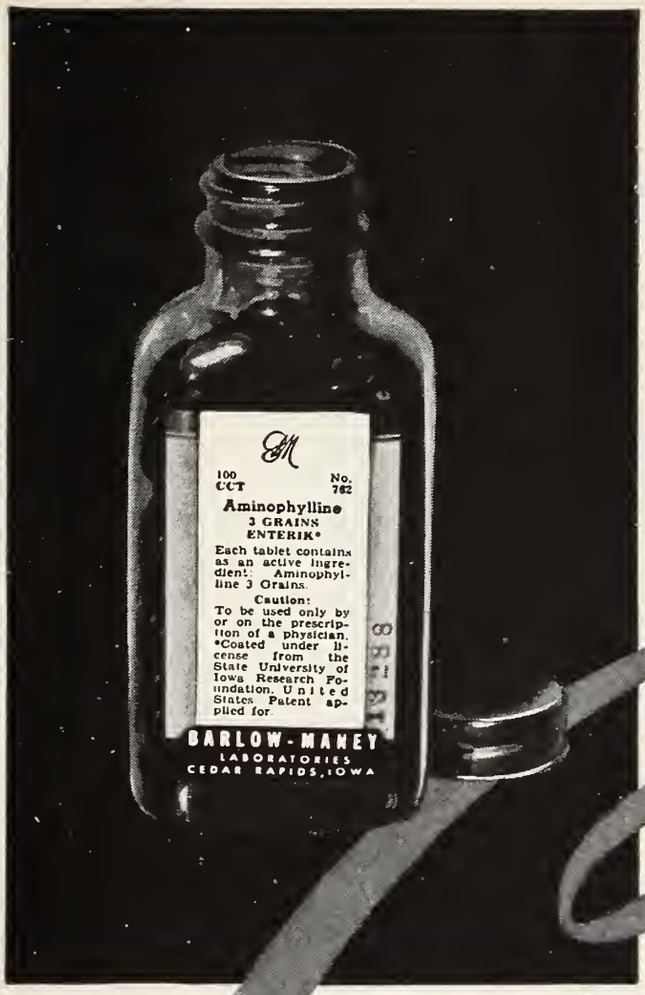
shall have a complete, thorough examination before it enters kindergarten, at the age of seven, and every four years during the school career. He blamed the medical profession because this was not done, seeming not to know that periodic examinations have been one of the major objectives of the medical profession for years; and their fairly successful accomplishment has produced the health records of which our nation boasts.

The educator is in a position to further our efforts by publicity through parent-teacher contacts as to the desirability and actual necessity of frequent health checkups.

This educator was told he had been quoted as favoring socialized medicine. He said this was a misquotation, and he hoped the medical profession could maintain its high standing as a profession, but we must do something to correct shortcomings that are credited to us. While the educator felt that government intervention might be necessary for the medical profession, at the same time he was incensed that government intervention was erasing the teaching profession, subtly but surely, as an independent profession.

Arrangements were made for a special committee to confer with the school authorities on all matters of health nature. The Medical Society also advocated that this school system go back to its policy of a dozen years ago and employ a full-time Doctor of Medicine for administrative and advisory service.

Say you saw it in the Journal of the Michigan State Medical Society



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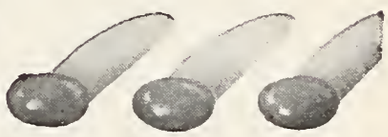

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In Memoriam

Theron W. Hammond, M.D., of Grand Rapids was born in Ransom Center, Hillsdale County, Michigan, in 1867 and was graduated from Wayne University College of Medicine in 1896. He was chief surgeon at the Michigan Veterans Facility from 1927 to 1941, was a member of the Kent County Medical Society, a retired member of the Michigan State Medical Society and a member of the American Medical Association. Doctor Hammond expired on October 9, 1949, in Grand Rapids at the age of eighty-two.

* * *

Arthur Field Harrington, M.D., of Montague, Michigan, was born June 11, 1876, near Grand Rapids. He was graduated from the University of Michigan School of Medicine in 1903 and also attended the New York Postgraduate School. He served as Chief of Staff at Hackley Hospital, Muskegon, for five years, was a member of the Muskegon County Medical Society, a life member of the Michigan State Medical Society, a member of the American Medical Association, and a Fellow of the American College of Surgeons. Doctor Harrington died November 7, 1949, in Montague, at the age of seventy-three years.

* * *

Albert Edward Henwood, M.D., of Mattawan, Michigan, was born March 28, 1878, in Dowagiac. He was graduated from the Detroit Medical College in 1902, served as a captain in the U. S. Army Medical Corps during World War I and with the 126th Infantry Division of the Michigan National Guard. Doctor Henwood was an honorary member of the Kalamazoo County Medical Society. He died August 23, 1949, at the age of seventy-one in Mattawan.

* * *

Norman W. Heysett, M.D., of Hart, Michigan, was born in Baldwin, Michigan, in 1904 and was graduated from the Indiana University School of Medicine in 1929. He served as president of the Oceana County Medical Society in 1934, was a member of the Michigan State Medical Society and of the American Medical Association. He was also affiliated with the American Trudeau Society, the American College of Chest Surgeons, the Nu Sigma Nu medical fraternity, and the Phi Gamma Delta fraternity. Doctor Heysett died September 6, 1949, in Fort Wayne, Indiana, at the age of forty-five years.

* * *

Harold Alonzo Hume, M.D., of Owosso was born in 1884 in Owosso and was graduated from Wayne University College of Medicine in 1909. He served as a Lieutenant Colonel in the U. S. Army Medical Corps, Michigan National Guard, during World War I, was Chief Surgeon for the Ann Arbor Railroad. He was a member of the Shiawasee County Medical Society, the Michigan State Medical Society, the American Medical Association, the American College of Surgeons and the Phi Beta Phi medical fraternity. Doctor Hume died at the age of sixty-four on August 18, 1949, in Owosso.

Ivan Lewis Hunt, M.D., of Scottville, Michigan, was born in April, 1884, near Scottville and was graduated from the University of Michigan Medical School in 1906. He served as mayor of Scottville for five years, was a member of the Board of Education for ten years and was City Health Officer. He was a member of the Mason County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor Hunt had practiced in Scottville for thirty-seven years and died June 14, 1949, at the age of sixty-five.

* * *

Harold Lee Hurley, M.D., of Jackson was born September 11, 1890, in Hamburg, Michigan, and was graduated from Wayne University School of Medicine in 1913. He served with the Army Medical Corps during World War I. He was president of the Jackson County Medical Society in 1926, was a member of the Michigan State Medical Society, the American Medical Association, the Phi Beta Phi medical fraternity and was a Fellow of the American College of Surgeons. Doctor Hurley died in Jackson, on March 11, 1949, at the age of fifty-eight years.

* * *

Stanley W. Insley, M.D., of Detroit was born in Grayling, Michigan, in 1899 and was graduated from Wayne University College of Medicine in 1922. He was a past president and secretary of the Wayne County Medical Society and was at one time editor of the *Detroit Medical News*. He served as president of the Michigan Allergy Society in 1942, was a member of the Wayne County Medical Society, the Michigan State Medical Society which he served as a leading member of its House of Delegates and of several important committees, a member of the American Medical Association and the American Academy of Allergy. Doctor Insley was Assistant Professor of Clinical Medicine at Wayne University at the time of his death on August 9, 1949, in Detroit. He was fifty years of age.

* * *

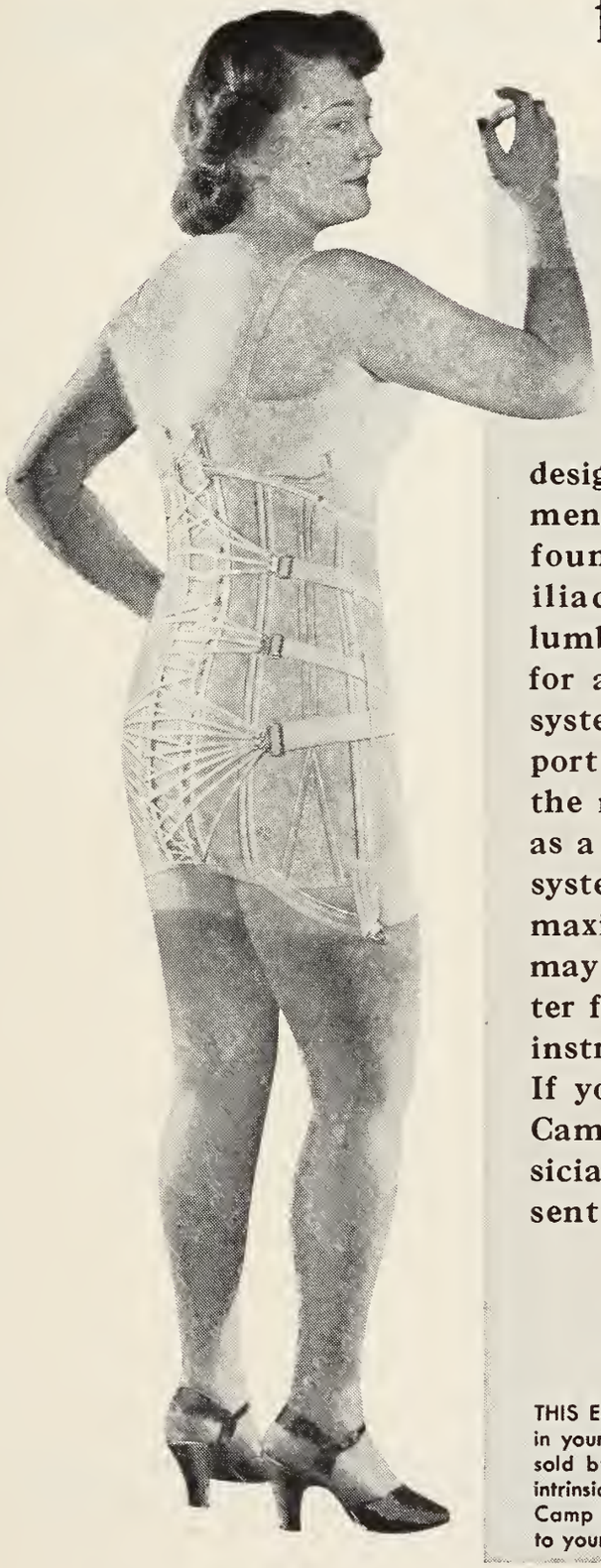
Richard Gainsforth James, M.D., of Detroit was born July 17, 1882, in Ontario and was graduated from Wayne, University College of Medicine in 1904. He served with the U. S. Army Medical Corps during World War I. He was a member of the Wayne County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor James died on May 29, 1949, at his summer home near Kingsville, Ontario, at the age of sixty-seven years.

* * *

Harry Asbury Jefferson, M.D., of Flint was born October 5, 1880, in Stateline, Wisconsin, and was graduated from the University of Illinois College of Medicine in 1905. He served as a medical officer with the 32nd Division during World War I, was a former member of the Genesee County Medical Society, the Michigan State

(Continued on Page 236)

CAMP ANATOMICAL SUPPORTS for ORTHOPEDIC CONDITIONS



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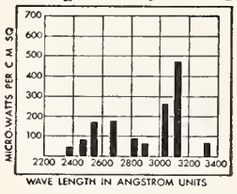

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Harry Asbury Jefferson, M. D.

(Continued from Page 234)

Medical Society and the American Medical Association. Doctor Jefferson died October 24, 1949, in Flint, at the age of sixty-nine years.

* * *

John A. Keho, M.D., of Bay City was born in 1874 at Saginaw, Michigan, and was graduated from Wayne University College of Medicine in 1897. He was City Health Officer for ten years, was a member of the Bay County Medical Society, a life member of the Michigan State Medical Society and a member of the American Medical Association. Doctor Keho died July 30, 1949, at the age of seventy-five in Bay City.

* * *

Thomas Ralph Kemmer, M.D., of Grand Rapids was born in 1892 and was graduated from Vanderbilt University School of Medicine, Nashville, Tennessee, in 1918. He served with the U. S. Army Medical Corps during World War I. He was a member of the Kent County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor Kemmer died at the age of fifty-seven years, September 8, 1949, in Grand Rapids.

* * *

Armand George Kersten, M.D., of Detroit was born April 20, 1891, in Detroit, and was graduated from Wayne University College of Medicine in 1914. He served with the U. S. Army Medical Corps during World War I. He was head of the Department of Urology at St. Mary's Hospital for thirty years, Detroit City physician, 1915-1917, and first staff president at Eloise Hospital. He was a member of the Wayne County Medical Society, the Michigan State Medical Society, the American Medical Association, the American College of Surgeons and the American Urological Society. Doctor Kersten died August 30, 1949, in Detroit at the age of fifty-eight.

* * *

Floyd Heaton Lashmet, M.D., of Petoskey, Michigan, was born September 12, 1898, in Manchester, Illinois, and was graduated from the University of Michigan Medical School in 1927. He saw military service with the Army during World War I. He was Assistant Professor of Internal Medicine at the University of Michigan 1929-34 and was Chief-of-Staff at Lockwood General Hospital, Petoskey. He was a member of the Northern Michigan Medical Society, the Michigan State Medical Society, the American Medical Association, the Phi Sigma Biological Fraternity, Sigma Xi, Alpha Kappa Kappa, a Fellow of the American College of Physicians, a Diplomate of the American Board of Internal Medicine and a member of the American Society for Clinical Investigation. Doctor Lashmet died October 24, 1949, in Petoskey at the age of fifty-one.

* * *

William W. Lathrop, M.D., of Jackson was born April 8, 1862, in Jackson and was graduated from the University of Michigan Medical School in 1884. He was a member of the Jackson County Medical Society, an emeri-

(Continued on Page 238)

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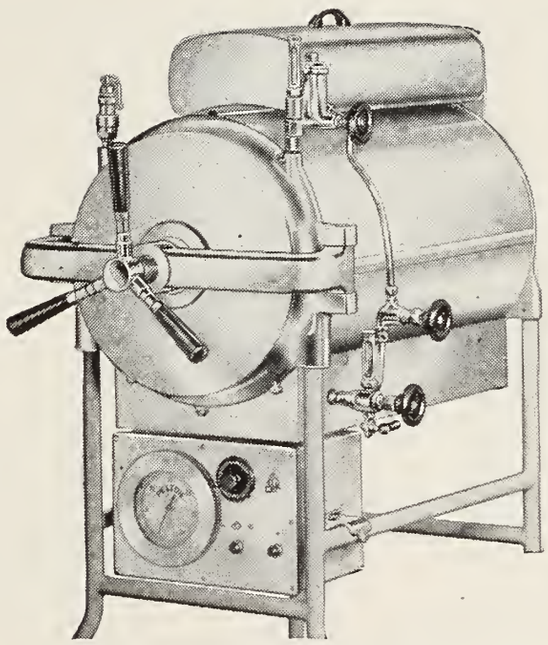

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William A. Lathrop, M.D.

(Continued from Page 236)

tus member of the Michigan State Medical Society, a member of its "Fifty Year Club" and a member of the American Medical Association. Doctor Lathrop had practiced for sixty-four years in Jackson and died on May 7, 1949, at the age of eighty-seven in Jackson.

* * *

Paul Herman Lippold, M.D., of Detroit was born in Escanaba, Michigan, in 1890 and was graduated from Wayne University College of Medicine in 1916. He was a member of the Wayne County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor Lippold died in Detroit on November 15, 1949, at the age of sixty years.

* * *

Donald Kenneth Mac Queen, M.D., of Laurium, Michigan, was born in Ontario in 1866 and was graduated from the Medical Faculty of Trinity University, Toronto, in 1890. He was a member of the Houghton-Baraga-Keeweenaw County Medical Society, an emeritus member of the Michigan State Medical Society, a member of its "Fifty Year Club," and a member of the American Medical Association. Doctor Mac Queen had practiced at Laurium since 1904 and was eighty-four years of age at the time of his death on October 16, 1949.

* * *

Crawford Ward McCormick, M.D., of Detroit was born in 1888 and was graduated from the University of Michigan Medical School in 1913. He was a member of the Wayne County Medical Society, the Michigan State Medical Society, and the American Medical Association. Doctor McCormick died on March 24, 1949, in Detroit at the age of sixty-one.

* * *

Francis Joseph McCue, Jr., M.D., of Adrian, Michigan, was born April 12, 1908, in Hudson, Michigan, and was graduated in 1935 from the University of Michigan Medical School. He served with the U. S. Navy during World War II. He was a member of the Lenawee County Medical Society, the Michigan State Medical Society, the American Medical Association and the American College of Surgeons. Doctor McCue was forty-one years of age at the time of his death on April 26, 1949, in Adrian.

* * *

Edwin A. McManus, M.D., Mesick, Michigan, was born May 5, 1863, in Woodstock, Ontario. He was graduated from the University of Michigan School of Dentistry in 1884 and from the Michigan College of Medicine and Surgery in 1898. He was a past president of the Wexford-Missaukee County Medical Society, a member of the Michigan State Medical Society and of the American Medical Association. He was village president at Mesick for twenty-four years and had practiced medicine more than fifty years. Doctor McManus died April 11, 1949, in Mesick at the age of eighty-five years.

(Continued on Page 240)

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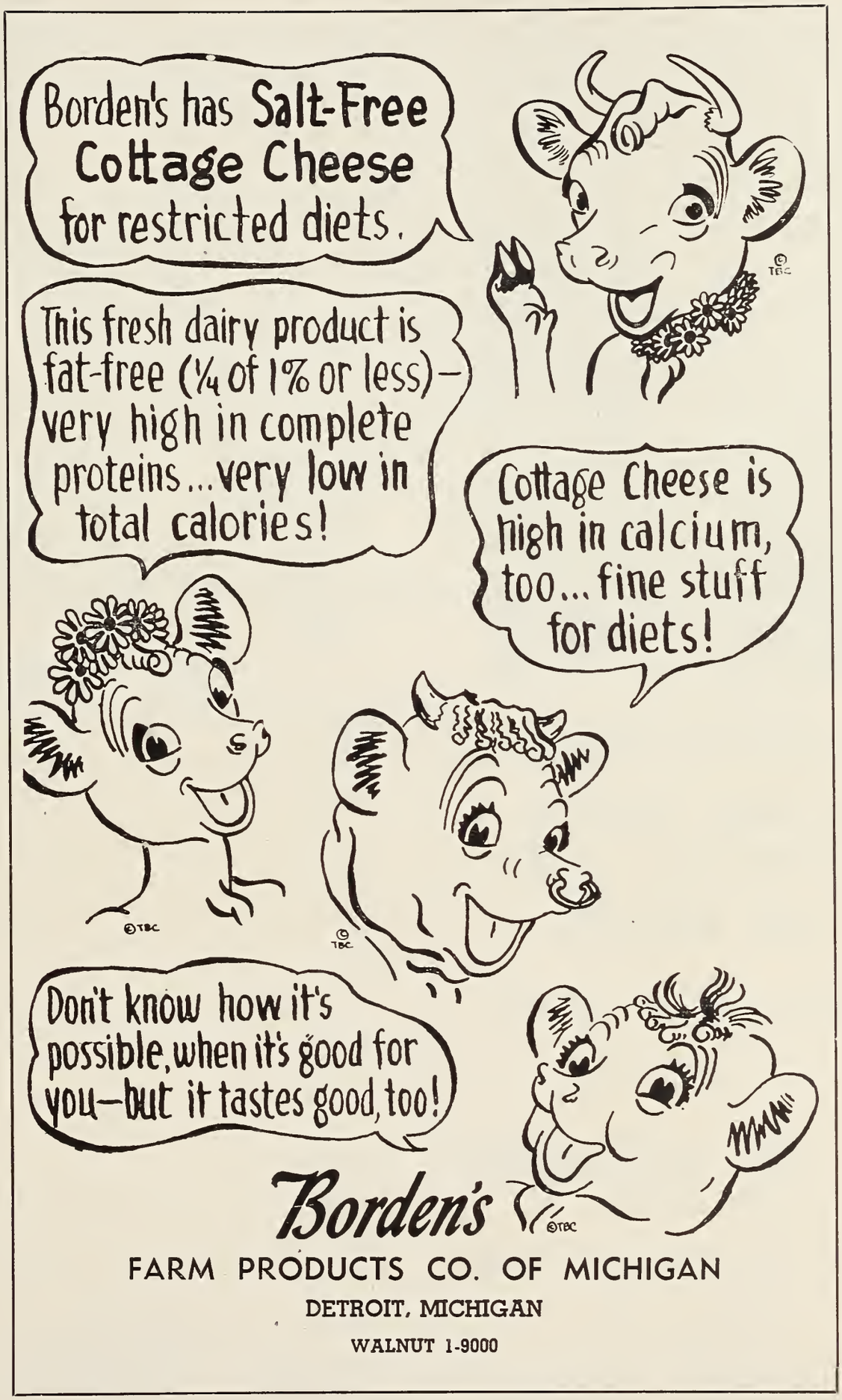
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(Continued from Page 238)

Harold Abiud Miller, M.D., of Lansing was born November 28, 1891, in Lansing, Michigan, and was graduated from the University of Michigan Medical School in 1916. He took postgraduate studies at the Chicago Lying-in-Hospital, and served with the Army Medical Corps during World War I. He served as chairman of the Michigan State Medical Society Legislative Committee for six years, was a past president of the Ingham County Medical Society, and was Chief-of-Obstetrics at St. Lawrence Hospital for many years. Doctor Miller was also a member of the American Medical Association and the Michigan Society of Obstetrics and Gynecology. He died on March 1, 1949, in Lansing, Michigan, at the age of fifty-eight years.

* * *

Morey David Miro, M.D., of Detroit was born in 1908 and was graduated from the Wayne University College of Medicine in 1932. He was a member of the Wayne County Medical Society, the Michigan State Medical Society and the American Medical Association. He was forty-one years of age at the time of his death on March 29, 1949, in Rochester, Minnesota.

* * *

GLAUCOMA IN GENERAL PRACTICE

(Continued from Page 206)

glaucoma if related by a patient past forty years of age. All such patients are entitled to an examination by a medical ophthalmic specialist.

2. The general practitioner should heartily support the ocular regime for the treatment of chronic glaucoma, as laid down by the opthalmologist.

3. Acute glaucoma is a surgical emergency. It must never be treated with atropine.

4. Congenital glaucoma must be treated surgically, preferably in the first attack before enlargement of the globe has ensued.

5. Traumatic hyphemia with secondary glaucoma requires paracentesis in the first few hours before damage to the cornea and optic nerve has become permanent.

* * *

INVESTIGATION?

Oscar R. Ewing, United States Federal Security Administrator, spent a week in London, pronounced the British National Health Insurance plan a success and said that a similar scheme would be good for the United States. . . . It has since been learned that Mr. Ewing did not visit a single doctor's surgery or inspect a hospital. . . .

The A.P. reports that during his week in London, "Ewing saw the prime minister, the ministers of health, national insurance and education and a number of other people." . . . Just a good thorough, unbiased appraisal of the situation, eh, Mr. Ewing?

—John S. Knight, Editorial in
Detroit Free Press, December 18, 1949

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. . . . . NEWS MEDICAL

The American Academy of General Practice of Michigan will sponsor a dinner meeting at the Book-Cadillac Hotel, Detroit, on Wednesday, March 8, 1950—on the occasion of the Michigan Postgraduate Clinical Institute.

* * *

Wayne University College of Medicine Alumni Association will hold an Alumni Dinner on Wednesday, March 8, 6:00 p.m., Book-Cadillac Hotel, Detroit. J. E. Cole, M.D., 344 Glendale, Detroit, is Chairman of Arrangements. Wives of alumni are cordially invited.

Wayne University College of Medicine Alumni headquarters—during the Michigan Postgraduate Clinical Institute—will be in the Book-Cadillac Hotel, Detroit. Look on bulletin board for number of suite.

* * *

The Michigan Proctological Society will hold a dinner meeting on Thursday, March 9, 1950, at the Book-Cadillac Hotel, Detroit, on the occasion of the Michigan Postgraduate Clinical Institute. E. F. Sladek, M.D., Traverse City, President, will be in charge of the meeting.

* * *

The Academy of General Practice of Wayne County will meet in the Book-Cadillac Hotel, Detroit, on Thursday, March 9, 1950, at 8:00 p.m.—coincident with the Michigan Postgraduate Clinical Institute.

* * *

The Detroit Regional Committee on Trauma, American College of Surgeons, will hold a Symposium on Trauma on Wednesday, March 8, 1950, in the English Room of the Book-Cadillac Hotel, Detroit, from 3:00 to 5:00 p.m.

Program

Traumatic Wounds of the Hand—Joseph L. Posch, Instructor in Surgery

Treatment and Care of Multiple Rib Fractures—Paul V. O'Rourke, Senior Instructor in Surgery; Visiting Surgeons, Herman Kiefer Hospital

Foreign Bodies of the Rectum—Charles W. Burt, Instructor in Surgery

Treatment and Care of the Ischemic Limb as the Result of Trauma—Prescott Jordan, Jr., Instructor in Surgery

Perforation of Small Bowel following Non-penetrating Wounds of Abdominal Wall—Grover C. Penberthy, Professor of Clinical Surgery; Joseph L. Posch, Instructor in Surgery; and Charles R. Reiners. Fellow in Surgery (to be read by Dr. Reiners)

Delayed Hemorrhage from the Ruptured Spleen —A. M. Large, Assistant Professor of Surgery, and Richard Berlin, Fellow in Pathology (to be read by Dr. Large)

All members of the Michigan State Medical Society are invited to attend this symposium.

The Michigan Regional Committee, of which G. J. Curry, M.D., Flint, is chairman, and D. R. Braise, M.D., of Flint, is secretary, will hold its mid-year business meeting following a luncheon in the Book-Cadillac Hotel on March 8. The Michigan Committee will be guests of the Detroit Regional Committee on Trauma, American College of Surgeons, of which Duncan A. Cameron, M.D., of Detroit is chairman.

* * *

The Michigan Branch of the American Academy of Pediatrics will hold a dinner meeting at the Book-Cadillac Hotel, Detroit on Thursday, March 9 at 7:00 p.m., during the meeting of the Michigan Postgraduate Clinical Institute.

The Michigan Branch of the Academy, organized at the last Grand Rapids MSMS Annual Session, plans to meet semi-annually, in March coincident with the Institute, and in September during the MSMS Annual Session.

For reservations at the March 9 dinner contact W. S. Nolting, M.D., 16840 E. Warren, Detroit 24, Michigan.

* * *

R. S. Sykes, D.D.S.

Wm. Lewis Brosius, M.D., Detroit will deliver the third annual Sykes Lecture, a feature of the 1950 Michigan Postgraduate Clinical Institute. The Lecture is scheduled for Thursday noon, March 9, in the Crystal Ballroom of the Book-Cadillac Hotel, Detroit.

The Sykes Lecture was established in 1948 through a grant from R. S. Sykes, D.D.S., of Muir, Michigan, and annually presents outstanding authorities in the cancer field. The first lecture was given by Frederick A. Coller, M.D., Professor of Surgery, University of Michigan Medical School. Harry S. N. Greene, M.D., Professor of Pathology, Yale University School of Medicine, delivered the address at the 1949 Institute.

* * *

American Board of Ophthalmology examinations: written qualifying tests will be taken in Chicago on October 2-6, 1950. For further information write Edwin B. Dunphy, M.D., Secretary-Treasurer, 56 Ivie Road, Cape Cottage, Maine.

* * *

The Trust Territory of the Pacific Islands (the Marianas, the Carolines, and the Marshalls) represent 96 islands entrusted to the United States. Of these 64 are at present inhabited. The distance from the extreme western party of the Caroline Islands to the extreme eastern part of the Marianas is about 2,765 statute miles. The islands fall into three time zones, with one hour of difference between each zone. From time to time, many of these islands were under Spanish rule, then German rule, Japanese rule, and now "trusteed" to the United States. The problems dropped into the lap of Uncle Sam with his island "empire" are multifarious and not easily solved.

(Continued on Page 244)

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(Continued from Page 242)

Seventy-eight per cent of England's health scheme is paid by taxation. Only one-sixth of the worker's weekly contribution of $1.00 goes to the health fund. However, this is not known by most of the workers in England.

* * *

"The welfare state is founded on the lack of faith in the people," stated John W. McPharrin in a talk at AMA Secretaries Conference, November 4, 1949, Chicago.

* * *

Rural practice experience is medical graduation requirement in Kansas. To acquaint students with the actual problems of general practice in rural areas, several weeks of training in the field of rural medicine will become a prerequisite for graduation from the University of Kansas Medical School. Senior medical students will be required to spend this time as an observer in the office of a general practitioner in a Kansas town of under 2,500 population. Dean Franklin D. Murphy, M.D., has selected thirty-nine Kansas physicians to carry out the work.

Similar plans are being carried out in Wisconsin and Oklahoma.

* * *

Postgraduate Assembly in Endocrinology, including diabetes, will be held at the Roney Plaza Hotel, Miami Beach, Florida, April 3-8, 1950, under the sponsorship of the Association for the Study of Internal Secretions and the American Diabetes Association. Fee of $75.00 for entire course with attendance limited to 100. Registration closes March 3. For program, write Harry H. Turner, M.D., 1200 N. Walker Street, Oklahoma City 3, Oklahoma.

* * *

The American College of Surgeons held a sectional meeting in Louisville, Kentucky, on February 20-21, according to F. A. Coller, M.D., Ann Arbor, president. Other sectional meetings will be held in Pittsburgh, March 14-15; Montreal, March 20-21; Winnipeg, April 3-4; and Seattle, April 10-11. For program, write American College of Surgeons, 40 E. Erie Street, Chicago 11, Illinois.

* * *

The First International Congress on Diseases of the Chest will be held in Rome, Italy, September 17-20, 1950. For information, write Chevalier L. Jackson, M.D., Chairman, 500 N. Dearborn Street, Chicago 10, Illinois.

* * *

The American Society for the Study of Sterility will hold its annual meeting in San Francisco, June 24-25, 1950. For program, write Walter W. Williams, M.D., Secretary-Treasurer, 20 Magnolia Terrace, Springfield 8, Massachusetts.

The Society offers an annual reward of $1,000 as the "Ortho Award" for an essay on the results of some clinical or laboratory research pertinent to the field of sterility. Full particulars may be obtained by writing the Secretary. Essays must be in his hands by April 1, 1950.

* * *

The American Goiter Association will meet at the Shamrock Hotel, Houston, Texas, March 9-11, 1950. For program, write George C. Shivers, M.D., Secy., Colorado Springs, Colo.

(Continued on Page 246)

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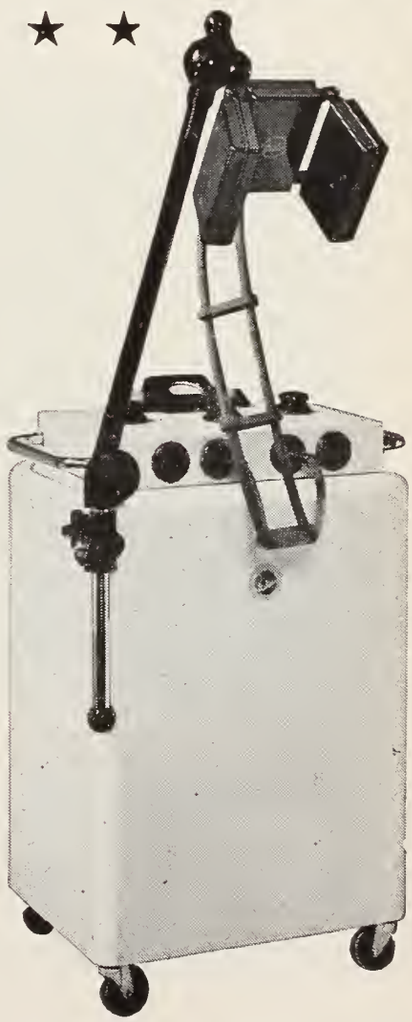

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(Continued from Page 244)

The Wayne University School of Occupational Health was terminated recently, and the resignation of Raymond Hussey, M.D., was accepted, with Wayne University President Henry stating: "I feel that Dr. Hussey has contributed not only locally but nationally, a brand of thinking which eventually I feel certain will produce lasting results."

* * *

Responsibilities and duties of County Advisory Committees to the National Foundation for Infantile Paralysis. The County Advisory Committee can aid the National Foundation for Infantile Paralysis:

(a) To establish the need for medical care
(b) To estimate the extent and duration of the hospitalization and medical care
(c) To review and audit all bills for medical services presented for payment by the Foundation. The Uniform Fee Schedule for Governmental Agencies is to be used as a guide in determining the fees
(d) To set the amount of money to be paid by the local chapter
(e) To review all cases at regular intervals with a view toward shortening the length of hospitalization required.

* * *

Nearly 1,000,000 dependents of deceased veterans were on Veterans Administration compensation and pension rolls on November 1, 1949. Included were 393,000 widows, 287,000 children and 288,000 parents.

* * *

W. H. Huron, M.D., Iron Mountain, has been appointed by the American Medical Association's Board of Trustees as a member of the newly created Legislative Committee of the AMA. Congratulations Dr. Huron!

TB claims more lives than all other infectious and parasitic diseases combined. From 1944 to 1948 inclusive, these diseases (not including the pneumonias) totaled 14,429 deaths in Michigan. Of this number TB caused 59.27%; syphilis 18.23%; influenza 7.76%; cerebrospinal meningitis 1.69%; polio 1.64%; and all others (more than 25) 11.41%. Tuberculosis—a truly preventable disease—is far from being under control.

Michigan Tuberculosis Association

"One-third of the more than 52,000 veterans who are mental patients in Veterans Administration hospitals have not been visited by members of their family or friends in a year or more."—Veterans Administration news release from its *Information Service,* December 28, 1949.

* * *

The Bay County Medical Assistants Society was organized on December 11, 1949, and a new constitution and by-laws were adopted. Officers were elected as follows: Mrs. E. Billette, president; Miss Maxine Blanchett, president-elect; Mrs. Dorothy Jones, recording secretary; Mrs. Alice Andrews, corresponding secretary; and Miss Marion Elbinger, treasurer.

(Continued on Page 248)

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(Continued from Page 246)

Michigan Authors

Herman Pinkus, M.D., Monroe, Michigan, and **David Frisch, M.D.,** formerly of Detroit, now in Minneapolis, Minnesota, are authors of a paper entitled "Inflammatory Reactions to Molluscum Contagiosum, Possibly of Immunologic Nature" published in *The Journal of Investigative Dermatology,* November, 1949. Dr. Pinkus is also author of two other papers published in 1949: "Reticulogranuloma," in *American Journal of Diseases of Children,* April, 1949, and "Alpha Ray Treatment of Dermatoses with Thorium X," in *The Journal of Investigative Dermatology,* January, 1949.

* * *

William Stanley Smith, M.D., Ann Arbor, is the author of a paper, "Streptomycin in Chronic Traumatic Osteomyelitis," which appeared in *Archives of Surgery,* January, 1950.

* * *

Arthur C. Curtis, M.D., Ann Arbor, will present a paper at the Scientific Assembly of the American Academy of General Practice, to be held in St. Louis, Missouri, February 20 to 23, on "Cutaneous Manifestations of Internal Disease."

* * *

G. W. Edmonds, M.D., W. H. Comer, M.D., J. D. Kennedy, M.D., and **I. B. Taylor, M.D.,** Detroit, are authors of an original article "Intravenous Procaine in General Anesthesia" which appeared in JAMA of November 12, 1949.

C. C. Sturgis, M.D., Ann Arbor, is author of an original article "Hematologic Disorders" which appeared in JAMA of December 3, 1949.

* * *

Roland P. Reynolds, M.D., Clarence I. Owen, M.D., and **Meyer O. Cantor, M.D.,** Detroit, are authors of an original article "Aneurysm of Uterine Artery and Vein" which appeared in the November 19, 1949, JAMA.

* * *

Frederick A. Coller, M.D., and **Marion S. DeWeese, M.D.,** Ann Arbor, are authors of an original article "Preoperative and Postoperative Care" which appeared in JAMA of November 5, 1949.

* * *

Eugene H. Payne, M.D., Detroit, is co-author of an original article "Pertussis Treated with Chloramphenicol" which appeared in JAMA of December 31, 1949.

* * *

C. G. Menzies, M.D., Iron Mountain, addressed the Professional Women's Club of Iron Mountain on January 6, 1950, on the subject "The Fallacies of Socialized Medicine."

* * *

Hippocrates essay competition. The International College of Surgeons announces its Hippocrates essay competition with the award of a $100 Government Bond for the best essay on "The Meaning of Hippocrates in the Medical World of Today." Although the award is offered specifically to men in the medical profession any-

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Surgical Technique, Surgical Anatomy and Clinical Surgery, four weeks, starting February 6, March 6.
Basic Principles in General Surgery, two weeks, starting April 3.
Personal Course in General Surgery, two weeks, starting April 17.
Surgery of Colon and Rectum, one week, starting March 6, April 10.
Esophageal Surgery, one week, starting June 5.
Breast and Thyroid Surgery, one week, starting June 26.
Thoracic Surgery, one week, starting June 12.
Gallbladder Surgery, ten hours, starting April 24.
Fractures and Traumatic Surgery, two weeks, starting March 20.
GYNECOLOGY—Intensive Course, two weeks, starting February 20, March 20.
Vaginal Approach to Pelvic Surgery, one week, starting March 6.
OBSTETRICS—Intensive Course, two weeks, starting March 6, April 3.
PEDIATRICS—Intensive Course, two weeks, starting April 3.
Personal Course in Cerebral Palsy, two weeks, starting July 31.
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Gastroscopy, two weeks, starting March 6, May 15.
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where in the world, there is no restriction as to eligibility. All essays should be addressed to Hippocrates Essay Contest, 1516 Lakeshore Drive, Chicago 10, and must be postmarked not later than March 1, 1950.

* * *

Councilor R. C. Pochert, M.D., of Owosso, is spending ten weeks in Pakistan, doing postgraduate eye surgery at the Shikapur Clinic with Sir Henry Holland.

* * *

"If the current trends are not checked, the mounting tax load and the continuance . . . of fiscal uncertainty will . . . undermine private enterprise by killing the incentives to take the risks essential to a dynamic, expanding economy," according to Harold G. Moulton, president of the Brookings Institution. The American economy is not strong enough now to carry "the cumulative burden of the social overhead," stated Dr. Moulton, who pointed out that in only two years out of the last twenty has the Federal Treasury had a surplus of revenues over expenditures.

* * *

"Medical Days of Friendship." During April, 1950, the International Society of Friends of Domus Medica is organizing Medical Days of Friendship. During this month, groups of American physicians who make a trip of three weeks in Europe under the auspices of the Domus Medica, will be the guests for one day, called the Medical Day of Friendship, of physicians of the most important countries visited. For further information, write Valentin Charry, M.D., 111 E. Oak Street, Chicago 11, Illinois.

* * *

The National Gastroenterological Association announces its Award Contest for 1950. The sum of $100 and a certificate of merit will be given for the best unpublished contribution on gastoenterology or allied subjects. For information, write the Association at 1819 Broadway, New York 23, N. Y. Entries must be received not later than June 1, 1950.

* * *

GP—Published by the American Academy of General Practice is the official name of the new monthly journal of the American Academy of General Practice. April 1 is the publication date set for Volume 1, Number 1. Welcome, GP, with best wishes for great success and long life!

* * *

"Be Your Age," a film made by the Metropolitan Life Insurance Company, is a sound 16mm. motion picture, running time eleven and one-half minutes. It is the dramatization of the recovery of a middle-aged, overweight individual from a heart attack and his readjustment and acceptance of a proper living condition. The film is available at the headquarters of Michigan Heart Association, 4421 Woodward Avenue, Detroit 1, Michigan, and lends itself well as part of the program for mixed audiences.

* * *

Post-payment for Medical Care to recipients of Old-Age Assistance, Aid to Dependent Children and Aid to the Blind.—The Michigan Social Welfare Commission and the Director of the Department of Social Welfare, W. J. Maxey, have developed a program of post-payment for medical care to recipients of Old-Age Assistance, Aid to Dependent Children, and Aid to the Blind, which is

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now being inaugurated experimentally in six Michigan counties. This program has the approval of the MSMS Council.

The Counties of Bay, Clare, Ingham, Kalamazoo, Kent, and Midland have been chosen for this experiment. If the revised procedure proves its effectiveness in these six counties, the program will be put into effect on a statewide basis.

The Welfare Supervisors of these six counties have been instructed to contact the county medical society secretary in their area. In turn, the secretaries of county medical societies are invited to present the details of this plan to their membership at the earliest possible moment.

* * *

The Northern Tri-State Post Graduate Medical Association will hold its seventy-seventh annual meeting, Tuesday, April 11, 1950, at the Pantlind Hotel, Grand Rapids.

Program

"The Present Therapy of the Commonest Skin Diseases"—A. P. R. James, M.D., Director, City Skin and Syphilis Clinics, Toledo, Ohio

"The Neurological Complications of Injury to the Head and their Treatment"—Paul C. Bucy, M.D., Professor of Neurology and Neurological Surgery, University of Illinois

"The Place of Surgery in the Treatment of Peripheral Vascular Disease"—G. DeTakats, M.D., Clinical Associate Professor of Surgery, University of Illinois

"Rupture of Bladder and Urethra," Etiology, Diagnosis and Treatment—Vincent J. O'Connor, M.D., Professor and Head of Department of Urology, Northwestern University Medical School

"Pathological Conference"—F. Hartman, M.D., and Associates, Ford Hospital, Detroit

"A Doctor Makes a Critical Survey of the Medical Profession"—Paul R. Hawley, M.D., Director, American College of Surgeons

"Pharmacologic Approach to the Treatment of Neurogenic Disorders"—Frederick F. Yonkman, M.D., Director of Research, Ciba Pharmaceutical Products

"Methods for Diagnosing the Types of Anemias and the Choice of Medicines in their Treatment"—R. Isaacs, M.D., Associate Professor of Medicine, University of Michigan

"The Management of the Diabetic Patient by the General Practitioner"—J. H. Warvel, M.D., Consultant, Research Department, Eli Lilly Company

"Anemias of Childhood, Plan for Diagnosis and Outline of Treatment"—J. L. Wilson, M.D., Department of Pediatrics and Communicable Diseases, University of Michigan

All members of the Michigan State Medical Society are cordially invited to attend.

* * *

The Michigan Society of Anesthesiologists held its regular monthly meeting on January 18, 1950, at the Hotel Porter, Lansing, Michigan. The program consisted of a series of case presentations by the membership.

The society will meet in Lansing (Porter Hotel) on March 15, at 6:30 p.m. Maurice H. Seevers, M.D., Professor of Pharmacology, University of Michigan, will speak on "Newer Pharmacological Developments in Anesthesia." All MSMS members are invited to attend.

* * *

During the past year working relations have been established between the Michigan Children's Aid Society and the seven Lansing pediatricians which have been most

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satisfying. In November, 1948, a medical program for children under the care of the Lansing Branch of the Michigan Children's Aid Society was instituted.

Dr. Horace French helped in bringing a routine medical program before the Lansing Pediatricians. Each doctor responded by setting aside one period each month when workers, accompanied by a Children's Aid nurse as co-ordinator, might bring the infants and children for routine check-ups and treatment. A nominal standard financial rate was established and during the year's period 255 individual appointments were provided. A report of the complete medical services follows; surgery and specialized medical needs were referred to other doctors.

An excellent medical program was given the children and standards for child care have been enhanced.

Total visits to pediatricians	255
Eye examinations at school	1
Refractions	6
Strabismus operations	2
Tonsillectomies	5
Submucous	1
Circumcisions	5
Removal of mole from neck	1
Audiometer tests	7
Radium treatment for deafness	3
X-ray treatment for deafness	4
X-ray treatments of pharynx	4
X-ray treatments for birthmark, 2 children	5
Hormone treatments, 1 child nine weeks	
X-ray of chest	8
Complete blood count or hemoglobin and R.B.C.	7

* * *

A county-wide general drive for membership is being conducted in Newaygo County in February by Michigan Medical Service and Michigan Hospital Service. The doctors and hospital staff members and the Medical Auxiliary members are very enthusiastic and expect to show the rest of the state what can be done when everybody is ready to work.

* * *

The Genesee County Medical Society announces its Fifth Annual Cancer Day, to be held Wednesday, April 12, 1950, in Merliss Brown Auditorium, Hurley Hospital, Flint, Michigan.

Guest Speakers include Grantley W. Taylor, M.D., Massachusetts General Hospital, Boston, Massachusetts, on "Cancer of Regional Lymph Nodes"; Cushman D. Haagensen, M.D., Presbyterian Hospital, New York City, on "Cancer of the Breast."

Reed M. Nesbit, M.D., University of Michigan, Ann Arbor, Michigan, on "Cancer of the Kidney and Bladder"; Lloyd F. Craver, M.D., Memorial Hospital, New York City, on "Hopeful Aspects of Malignant Lymphomas."

A fifth speaker of national reputation will be announced at a later date.

All MSMS members are cordially invited to attend.

* * *

The University of Illinois has started construction on a 14-story addition to the Research and Educational Hospitals in the Chicago Medical District. $5,559,929 has been released for the project. This will raise the amount of present construction in the Medical Center District to over $25,000,000. Other projects are Veterans Administration Hospital, Chicago State Tuberculosis Hospital, Cook County Intern's Residence, and Nurses' residence at Presbyterian Hospital. This is the first of two

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* * *

Governor Williams, in his weekly broadcast, announced that he will recommend to the Legislature the construction of a Medical Science building at Wayne University, and a new Clinic Building at Ann Arbor, also a new building for Veterinary Medicine at Michigan State.

* * *

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@ $37.00	4,593	4,662
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@ 9.25	17	0
Associate Members	81	124
Emeritus and Life Members	86	162
Retired Members	3	13
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Acknowledgment of all books received will be made in this column, and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.

PSYCHOSOMATIC MEDICINE—The Clinical Application of Psychopathology to General Medical Problems. By Edward Weiss, M.D., Professor of Clinical Medicine, Temple University Medical School, Philadelphia; and O. Spurgeon English, M.D., Professor of Psychiatry, Temple University Medical School, Philadelphia. New second edition. 803 pages. Philadelphia and London: W. B. Saunders Company, 1949. Price $9.50.

This volume is a second edition that was first published six years ago. The authors have rearranged their material. Much has been rewritten and new clinical material added. Included have been new charts and tables summarizing diagnostic points and treatment suggestions.

To those physicians not acquainted with this work, the authors have assembled a great amount of psychiatric literature and case reports pointing out the relationship between emotional disturbances and their somatic effects. They stress the necessity with every patient to include a personality review. Besides the physical examination and laboratory reports, they urge the inclusion of a personality study, and suggest that the history need not differ in form but it must in substance. It is again recommended by the authors that a diagnosis of psychoneurosis should be made on positive findings and not by exclusion of organic findings.

It appears to the reviewer that a book on this subject should be in every physician's library. Medicine is recognizing the importance of functional disturbances to the patient, and greater effort is being made by the medical profession to treat those cases more satisfactorily. There are several good books on this subject on the market, but this appears to be as inclusive and complete as any and can be highly recommended. G. K. S.

ABRAHAM LEVISON ANNIVERSARY VOLUME. Studies in Pediatrics and Medical History in Honor of Dr. Abraham Levison on his Sixtieth Birthday. Solomon R. Kagan, M.D., Editor. Editorial Board: Isaac A. Abt, M.D., Reuben Friedman, M.D., Prof. Max Neuburger. New York: Froben Press, Inc., 1949. Price $6.00.

The content of this volume falls within three categories.

1. Original articles by a group of distinguished colleagues of Doctor Levison. These deal with scientific subjects particularly associated with that great individual's life and work.

2. A series of seven articles under the general heading, Medical History.

3. A bibliography of medical publications of Doctor Levison, interspersed with quotations.

The volume contains much of scientific interest in addition to its claim to one's attention because of the great physician it honors. The twenty-six original articles constitute a treasure trove of thought from a gallery of notables.

This reviewer was particularly impressed with the contributions of Loyal Davis et al, Kanner, Kagan and Parmelee, but the entire volume deserves careful attention. H. F. B.

Say you saw it in the Journal of the Michigan State Medical Society

A TEXTBOOK OF SURGERY. By American Authors. Edited by Frederick Christopher, B.S., M.D., F.A.C.S., Professor of Surgery, Northwestern University Medical School; Chief Surgeon, Evanston (Illinois) Hospital. Fifth Edition. 1,550 pages with 1,465 illustrations on 742 figures. Philadelphia and London: W. B. Saunders Company, 1949. Price $13.00.

This is one of the finest short reference works we have seen in a long time. The many articles covering the entire field of operative work are written clearly and concisely by the leaders of American surgery.

Each article seems to possess the quality of imparting all possible information on any given subject in a limited space. As a matter of fact, the impression is gained that a short perusal of any given article would enable one to present quite a scholarly discussion on that particular subject on short notice.

In addition to the above, this edition has been brought up to the minute with the most recent advances in surgery over the past four or five years. This is especially true of such articles as those on peptic ulcer, gastric and esophageal carcinoma, antibiotics and preoperative and postoperative care. The book is to be highly recommended.

R. L. M.

LIFE AMONG THE DOCTORS. By Paul De Kruif, in collaboration with Rhea De Kruif. New York: Harcourt, Brace and Company, 1949. Price $4.75.

Another book comes from the fluent pen of Paul De Kruif. This one is just as challenging as his others. He tells of the life and contacts with a few of what he calls real doctors. These do not all carry the degree of M.D. Some are D.P.H., or Ph.D., but all have taken a rather advanced and leading part in the conquest of disease.

First, De Kruif tells the story of Cy Young of the Michigan State Health Department Laboratories. It is a most entertaining story of the fight against time to establish the first and best Public Health Laboratories. He tells many interesting tales of Cy Young and Greg Christian. Tom Spies' research and successful fight against vitamin deficiency is just as thrilling. He conquered pellagra, almost singlehanded.

The story of the antibiotics and their use in venereal disease told in much detail and with a show of rejoicing over the successes shown in countering the advice and leadership of what he calls the big committee men. De Kruif's heroes are justly praised, their work fully described, and when the "big brass" has guessed wrong, they are told of it. De Kruif is being much less rabid in his enthusiasm for new theories and procedures until they have been more fully proven, but he is still the champion of the researcher who works hard against discouragement, and who finds that his work is leading to success. This book is intensely interesting.

MEDICAL MEETING. By Mildred Walker. New York: Harcourt, Brace and Company, 1949. Price $3.00.

Mildred Walker has evidently attended medical meetings. She has written before about "Dr. Norton's Wife." This is a story of the life and work of a doctor and his wife who after intern training accept a small tuberculosis hospital appointment in order to continue experimental work on antibiotics. The struggles and disappointments, also the successes, are delineated, culminating in the presentation of a paper at the national medical meeting, where the doctor discovers that someone else, with ex-

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cellent equipment and abundant help, has developed something very similar, and appears on the program just a few hours ahead, so gets the publicity. The story is not finished. The reader is left to imagine the further success of the young investigator from the fact that an advantageous connection with a teaching position is offered. The novel is good.

X-RAY TREATMENT, ITS ORIGIN, BIRTH AND EARLY HISTORY. By Emil H. Grubbé, B.S., M.D., F.A.C.P., Charter Member and Emeritus Member of the Radiological Society of North America; Charter Member of the American Roentgen Ray Society; Diplomate of the American Board of Radiology; Associate Fellow of the American Medical Association; Emeritus Member of the Illinois State Medical Society, and a Member of the Chicago Medical Society. Saint Paul and Minneapolis. Bruce Publishing Co., 1949. Price $3.00.

Too often men who have made monumental contributions to the world of science die before they can see the ultimate value of what they have helped to pioneer. In the case of x-ray therapy, we are more fortunate. Dr. Grubbé has lived a long and useful life, and in his declining years has been persuaded to write what is really his memoirs. An extremely personal note prevails throughout the entire book; still through it all one can note the amount of true original thought which was brought to light in the development of this then unchartered field.

For an authentic personalized history of the early days of x-ray therapy, this book is a good source. It is very interesting reading. G. T. P.

HANDBOOK OF MEDICAL MANAGEMENT. By Milton Chatton, A.B., M.D., Instructor in Medicine, University of California Medical School, San Francisco; Sheldon Margen, A.B., M.D., Clinical Instructor in Medicine, and Research Associate, University of California Medical School, San Francisco, and Henry D. Brainerd, A.B., M.D., Assistant Clinical Professor of Medicine and Pediatrics, University of California Medical School, Assistant Clinical Professor of Pediatrics, Stanford University School of Medicine, Physician in Charge, Isolation Division, San Francisco Hospital. Palo Alto: University Medical Publishers, 1949. Price $3.00.

This little paper-covered, pocket-size book contains over 400 pages of condensed instructions and information on the management of hundreds of diseases. It is rather surprisingly complete. The first two chapters are on General Aspects of Medical Management and General Symptomatic Treatment, followed by a chapter on Dietetics and Nutrition. Diseases are then classified according to systems: skin, respiratory, heart, et cetera. A very useful innovation is the fact that every disease described and treated is given its code number according to the Standard Nomenclature of Diseases and Standard Nomenclature of Operations of the A.M.A. This is a handy list, as many hospitals are now requiring their clinical records to include the standard nomenclature, and the book on nomenclature is not always available. This book is convenient and very useful.

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DELEGATES TO A. M. A.

Delegates

W. D. Barrett, M.D., Detroit.....1950
W. H. Huron, M.D., Iron Mountain 1950
R. L. Novy, M.D., Detroit.....1950
L. G. Christian, M.D., Lansing.....1951
W. A. Hyland, M.D., Grand Rapids 1951

Alternates

R. A. Johnson, M.D., Detroit..... 1950
R. H. Denham, M.D., Grand Rapids 1950
C. I. Owen, M.D., Detroit.....1950
H. H. Cummings, M.D., Ann Arbor 1951
E. C. Texter, M.D., Detroit.....1951

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THE COUNCIL

Many of our members have seriously criticised the official family of the Michigan State Medical Society, claiming that men get on the Council and stay there a very long time, that there should be changes.

Records show that there is only one member on the Council now who was there during 1935 to 1939. In other words, there has been a complete change, except one name since 1939. The past fourteen years there have been sixty-five changes in this official family, which would seem to indicate that the membership in selecting its Councilors and Executive Officers have provided for a change of viewpoint, and at least that the Administrative Department of the State Medical Society is in touch with the membership.

ATOMIC ENERGY WARFARE

An atomic energy talk was made January 31 at a joint dinner and meeting in Indianapolis, Indiana, to an American Legion Post, the Indianapolis Medical and Dental Societies, and the Southwestern Pharmaceutical Society, by Major General George E. Armstrong, Deputy Surgeon General of the Army, and Colonel James P. Cooney, MC, Chief, Radiological Branch, Division of Military Application, Atomic Energy Commission. The talks were on the medical effects of atomic explosion and various measures which could be taken to minimize casualties, both in preparation against an atomic attack and following such a bombardment. (From Department of the Army, Technical Information Office, release dated January 31).

2,000 EXPECTED FOR BIG INDUSTRIAL HEALTH CONFERENCE IN CHICAGO

"Teamwork In Industrial Health" is the theme of the 35th annual meeting of the American Association of Industrial Physicians and Surgeons and four other industrial associations which will be held in the Sherman Hotel in Chicago, April 22-29. The registration during the meeting is expected to exceed 2,000.

Founded in 1915, the object of the American Association of Industrial Physicians and Surgeons is "to foster the study and discussion of the problems peculiar to industrial medicine and surgery; to develop methods adapted to the conservation of health among workers in the industries; to promote a more general understanding of the purposes of medical care for employes, and to unite into one organization members of the medical profession specializing in industrial medicine and surgery for their mutual advancement in the practice of their profession."

The Association's convention is held concurrently with four other groups—The American Industrial Hygiene Association, The American Conference of Governmental Industrial Hygienists, The American Association of Industrial Nurses, and the American Association of Industrial Dentists.

Dr. Edward C. Holmblad, Chicago, managing director of the American Association of Industrial Physicians and Surgeons, in announcing plans for the 1950 meeting, said that "the bringing together of these groups is mutually beneficial and these annual meetings serve as postgraduate courses covering the entire field of industrial health and hygiene, occupational ailments and traumatic surgery."

More than one hundred papers will be read during the eight-day meeting. Some of the problems to be discussed will be the toxic effects of materials used in industry, accident hazards, industrial medical aspects of the radioactive isotopes, treatment of injuries, x-ray interpretation of industrial cases, the use of antibiotic or "miracle" drugs, the effects of the newer treatments for arthritis, the value of an industrial eye program, back injuries, trends in vacation policies of industrial workers, periodic health examination of executives and the importance of human relations with the industrial worker.

Various section meetings will be held during the week. These will deal with general manufacturing, steel and heavy industry, petroleum, rubber and chemicals, hand and restorative surgery, workmen's compensation and insurance, and the mining industry.

On Monday afternoon and Tuesday morning, April 24 and 25, there will be hospital clinics at St. Luke's and Cook County in Chicago. These clinics will present the newer types of diagnosis and treatment of industrial injuries and the handling of medical cases.

The session on Tuesday evening will be devoted to a symposium on alcoholism in industry.

All of the five sponsoring groups will gather at a joint meeting Thursday afternoon. The program will be built around the convention theme: "Teamwork In Industrial Health" which is aimed at rendering a comprehensive, complete medical service to all industrial workers.

Interest in the field of industrial dentistry has increased so much during the past year that the American Association of Industrial Dentists is sponsoring three full days of discussions and field trips instead of two as was done in former years.

During the Conference, more than twenty large industrial plants in the Chicago area will have open house in their medical departments for industrial physicians and surgeons and industrial nurses.

(Continued on Page 272)

Physicians' choice

in a wide variety of allergic disorders

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Michigan Medical Service

MSMS AND MMS FEE SCHEDULE SURVEY

At the last meeting of the House of Delegates of the Michigan State Medical Society, it was voted that Michigan Medical Service issue a new certificate with family income limits of $5,000.00.

A survey is now being undertaken by the Michigan State Medical Society and Michigan Medical Service for the purpose of establishing a Schedule of Benefits for surgical services to Blue Shield subscribers whose annual family income is up to $5,000.00.

All members of the Michigan State Medical Society have been mailed an abbreviated schedule listing the commonly used procedures, with a blank for each doctor's recommended fee. Also on the schedule are listed the fees now paid by Michigan Medical Service for services to subscribers within the $2,500 income limit.

In a letter to all Michigan State Medical Soeiety members, W. E. Barstow, M.D., President, points out that "This schedule should reflect your present charges for services to patients whose annual family income is up to $5,000. Approximately 85 per cent of the people in Michigan are within this income limit.

"You are requested to review personally a few of the more commonly used procedures," Dr. Barstow says. "Please indicate your usual fee to the 85 per cent of the population for those procedures which YOU perform in your routine practice.

County Medical Societies and hospital staffs have been requested to review the entire fee schedule and make recommendations. Specialty groups will receive a list of the procedures they perform for their suggestions.

M.D. PARTICIPATION IN MICHIGAN MEDICAL SERVICE

Michigan Medical Service is "the best answer the medical profession of Michigan has supplied to date" to the demands of the people who are asking for socialized medicine, according to J. S. DeTar, M.D., in a letter to all members of the 14th Councilor District.

"Michigan Medical Service is not the complete and final answer to the question of the cost of medical care," Dr. DeTar says, but goes on to point out that "it is the best answer thus far submitted within the scope of free, unsocialized medical practice."

The purpose of his letter to Michigan State Medical Society members of his district, he explains, is to present the reasons why doctors should become participating physicians in the Blue Shield Plan.

"Participation," he says, "simply means that you will agree to accept the Michigan Medical Service fee, as full fee for all subscribers with family incomes under $2500. This constitutes only 20 per cent of the employed population in Michigan."

"A participating physician may charge his usual fee to all over the $2500 limit, billing the patient for the portion of the fee which Michigan Medical Service has not paid."

There are now 4,714 Blue Shield participating physicians. This is roughly 85 per cent of the total doctors of medicine in the state.

"It would be of great value to a good cause if every member of the Michigan State Medical Society would agree to participate in Michigan Medical Service," Dr. DeTar declares. "This applies even if a physician sees no patients. The value lies in having the profession unanimously behind our own answer to the proponents of socialization of the profession."

The Council of the Michigan State Medical Society, at its Annual Session of January 20-21, 1950, adopted a motion that The Council of the Michigan State Medical Society request Michigan Medical Service to send to each Councilor a list of all non-participating physicians in his District, together with participation forms, and requested that each Councilor make an early effort to secure participation certificate signatures of all non-participants. Michigan Medical Service sent such lists and participation agreements as instructed to all Councilors on January 27, 1950.

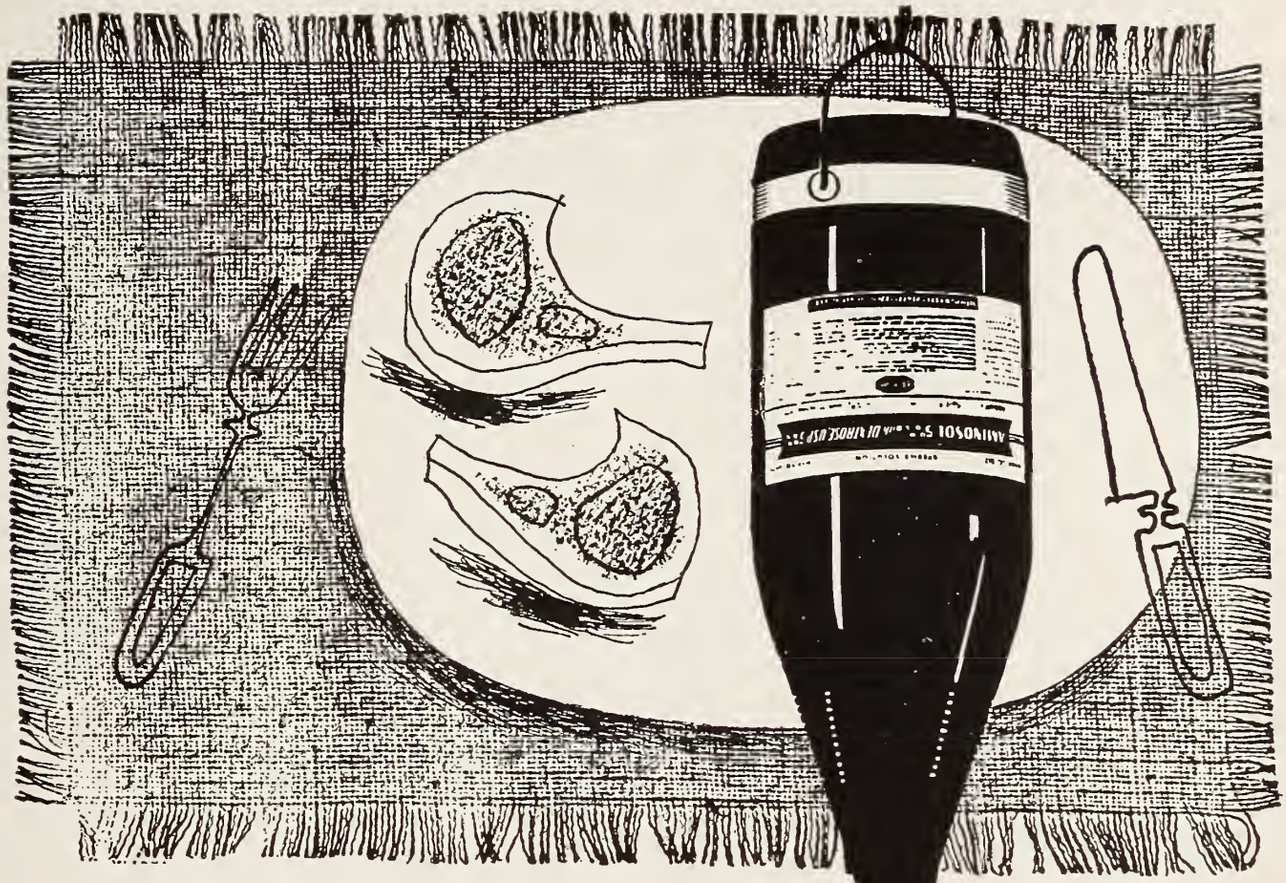
MMS INCREASES SURGICAL CERTIFICATE SUBSCRIPTION RATE

Michigan Medical Service has announced that it is necessary to increase the monthly subscription rates on its *surgical certificate* only as follows:

10c for the individual.
20c for the subscriber and spouse.
35c for the family.

"We know you will all be interested in knowing why the above action, which was authorized by our Board of Directors January 18, 1950, was necessary. For a considerable time past, it was evident from our financial statements that the amount of our subscription fees was not sufficient to cover the cost of services, administration expense and re-

(Continued on Page 272)



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When the patient can't eat protein foods, you can rebuild and maintain nitrogen balance intravenously with AMINOSOL. The source of AMINOSOL, animal blood fibrin, is one of the highest biologic value proteins. As a hydrolysate, AMINOSOL contains all the essential amino acids in the correct pattern for optimum tissue repletion.

Clinical usage has shown AMINOSOL may safely serve as the *only* intake of amino acids (2000 cc. daily for a 70-Kg. man) or as a dietary supplement in critical or prolonged illnesses (1000 cc. daily).

Stable for two years or more, AMINOSOL is sterilized by filtration and autoclaving. Rigid tests prove each manufactured lot pyrogen- and antigen-free. It is available in 250-cc., 500-cc. and 1000-cc. containers. A sure way to preserve the safety of AMINOSOL in venoclysis is to employ sterile, disposable VENOPAK* equipment—which has a strip of gum rubber tubing next to the needle adapter for easy injection of vitamin B complex or vitamin C during the infusion. For detailed literature on the AMINOSOL line of Abbott's parenteral solutions, take a moment now to drop a card to ABBOTT LABORATORIES, North Chicago, Illinois.

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5% Solution
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MMS INCREASES SURGICAL CERTIFICATE SUBSCRIPTION RATE

(Continued from Page 270)

serves. Thorough studies have been under way for a long period of time to determine what should be done to correct the situation. You may or may not be aware of the fact that Michigan Medical Service has not increased its rates since 1942, or approximately eight years. During that time, there have been many liberalizations, adjustments in fees, etc., all for the benefit of the subscriber. These additional benefits were provided when it was felt that such action could be taken without jeopardizing the financial position of the company. It is impossible to point out one factor alone as the cause for the loss from operations; rather, it is a combination of various factors, with increased *utilization* by subscribers as the most prevalent."

As a result of this increase in rates for the Surgical Plan of the Blue Shield Michigan Medical Service, greater interest is being shown in the organization's more comprehensive program of medical-surgical protection. This interest follows logically, inasmuch as there is no increase in rates for the medical protection, and the Blue Cross-Blue Shield hospital-medical-surgical plan can be obtained at rates just slightly higher than the rates for the less comprehensive hospital-surgical plan.

It is consequently expected that there will be a higher enrollment in the medical-surgical plan. Under the medical-surgical plan, doctors are reimbursed by Blue Shield for services rendered in non-surgical hospital cases, such as pneumonia, heart conditions, rheumatic fever, infantile paralysis, contagious diseases, etc.

Effective March 1, 1950, reimbursements for services under the medical-surgical contract are as follows: $10.00 for the first day, $4.00 for the next three days and $3.00 for the next 116 days. The subscriber is thus entitled to 120 days of service per certificate year for each enrolled member of the family. Tuberculosis, nervous and mental conditions are limited to thirty days per certificate year.

During 1949, the value of services to Blue Shield subscribers came to more than $9,800,000. Payments for veterans receiving services under the Veterans Administration program of "home town care" came to $1,172,794.28.

More than 1,500,000 persons in Michigan are now enrolled in Michigan Medical Service.

EFFICIENCY?

The Executive Branches of the Government purchase six billion dollars worth of supplies each year. A hundred and fifty thousand employes are used for this service with the salary of four hundred forty million dollars. There are nine hundred forty traffic employes for this service and nine hundred twenty-five auditors on the work of these traffic employes. The current inventories of Government supplies, not including military, is twenty-seven billions of dollars. There are over one million motor vehicles. One-half of the purchases made by the Government are in sums of ten dollars or less, and the cost of processing each service is over ten dollars. *Now is that efficiency?*

The Government is using for storage space (files) in Government buildings eighteen million square feet of public building space, which amounts to six times the space in the Pentagon Building.—*Hoover Commission Report.*

INDUSTRIAL HEALTH CONFERENCE

(Continued from Page 268)

Dr. Alfred H. Whittaker, of Detroit, president of the American Association of Industrial Physicians and Surgeons, said the association has a membership of nearly 2,300 physicians and surgeons, representing manufacturing, commercial, transportation and public-utility industries of the country.

Dr. Edward H. Carleton of the Inland Steel Company of East Chicago, Ind., will take over the presidency of the association at the Chicago meeting.

POSTGRADUATE COURSE ON GENERAL SURGERY

"Practical Problems in General Surgery" is the subject of a continuation course to be presented on April 6, 7, and 8 by the Frank E. Bunts Institute and the Cleveland Clinic. On Friday evening, April 7, Dr. Daniel C. Elkin of Emory University, Dr. Claude Beck of Western Reserve University Medical School, and Dr. R. B. Turnbull of the Cleveland Clinic will take part in a symposium on "Vascular Surgery". On Saturday morning, April 8, Dr. George G. Finney of Johns Hopkins University and others will present Panel Discussions on surgery of the colon, pancreas, biliary tract, and stomach and duodenum.

Inquiries regarding the complete program and registration can be addressed to the Director of Education, Frank E. Bunts Educational Institute, 2020 East Ninety-third Street, Cleveland 6, Ohio.

AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY, INC.

The general oral and pathology examinations (Part II) for all candidates will be conducted at The Shelburne, Atlantic City, New Jersey, by the entire Board from Sunday, May 21 through Saturday, May 28, 1950. Formal notice of the exact time of each candidate's examination will be sent him several weeks in advance of the examination dates.

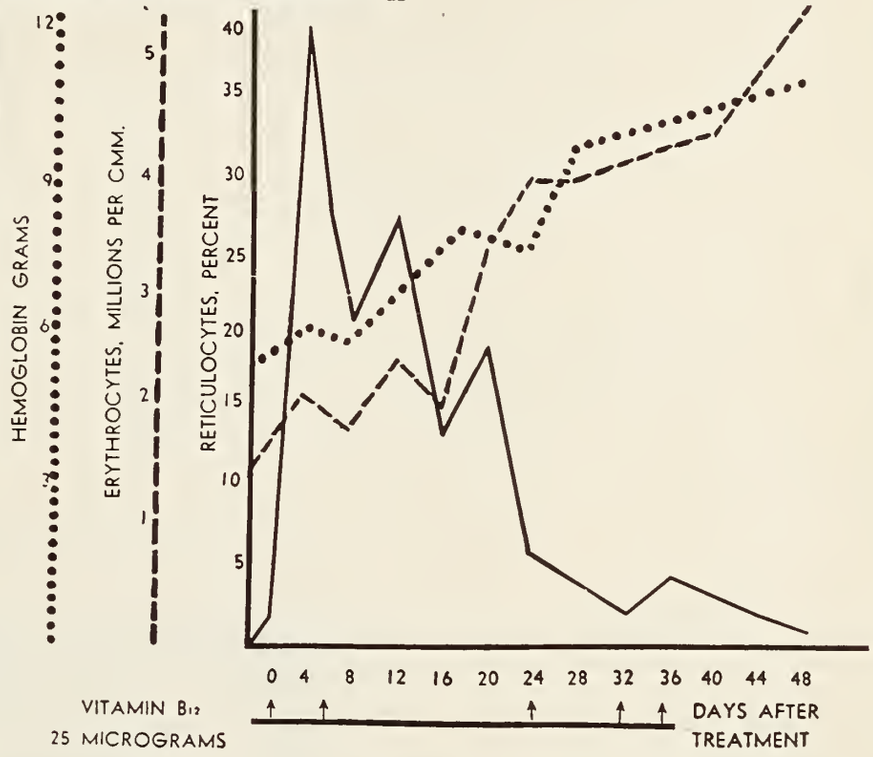
Candidates for re-examination in Part II must make written application to the Secretary's office not later than April 1, 1950.

Applications are now being received for the 1951 examinations. Application forms and Bulletins are sent upon request made to Paul Titus, M.D., Secretary, American Board of Obstetrics and Gynecology, Inc., 1015 Highland Building, Pittsburgh 6, Pennsylvania.

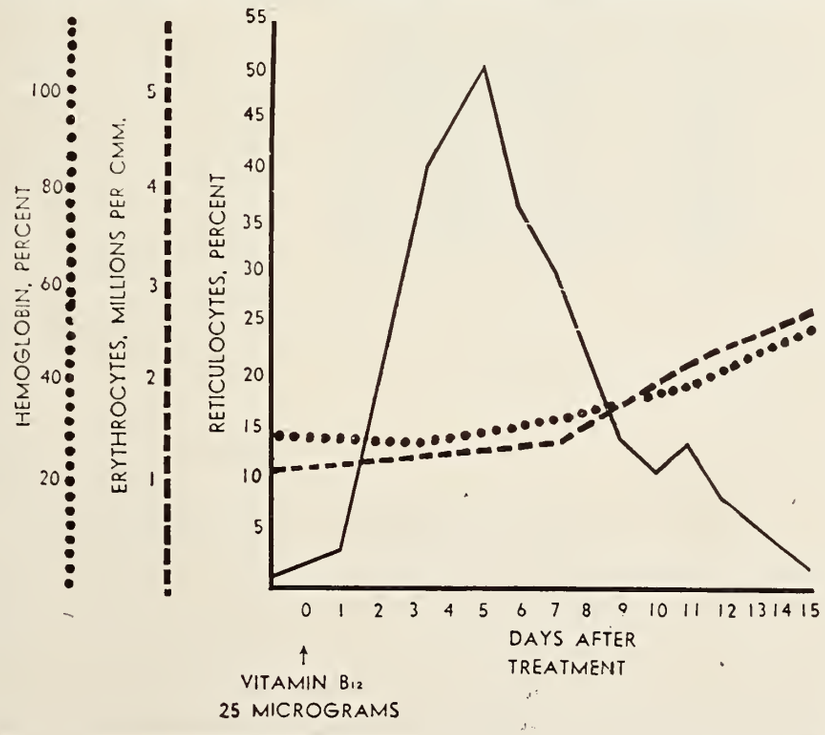
RESPONSE TO CRYSTALLINE VITAMIN B_{12} THERAPY

These charts are reprinted from the article "Crystalline Vitamin B_{12} in the Treatment of Megoblastic Anemias," by E. Schmatolla, M.D., A. Gibson, M.D., and J. M. Carlisle, M.D., which appeared in Postgraduate Medicine, Oct., 1949.

TYPICAL HEMATOLOGICAL RESPONSE OF PATIENT WITH PERNICIOUS ANEMIA IN RELAPSE TO TREATMENT WITH CRYSTALLINE VITAMIN B_{12}



TYPICAL HEMATOLOGICAL RESPONSE OF PATIENT WITH NUTRITIONAL MACROCYTIC ANEMIA TO TREATMENT WITH CRYSTALLINE VITAMIN B_{12}



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Political Medicine

"SOCIALIZED MEDICINE AS I SAW IT."

(Excerpts from a recent address by Dr. Ralph J. Gambell, Insurance Economics, January, 1950. *Colliers* for February 11, 1950 has an article from this Doctor.)

Over here you have been led to believe that the vast majority of British doctors are in favor of this scheme. The figure has been quoted to you that considerably over 90 per cent of them have already joined. The presumption, of course, is that they joined willingly. Nothing can be further from the truth. Let me use my own case as an example. Before the introduction of governmental medicine in July, 1948, England had a system which is little known here in the U. S. When a doctor wished to settle in some area, it was not the usual custom for him to just hang up a shingle. In the normal course of events, he would succeed to the practice of a doctor who had died, or more often, a doctor who had retired, and for the succession he would pay a purchase price usually calculated at 1½ times the annual gross taking of the practice though in particularly favorable areas this could go up to 1¾ or even twice the annual gross. Now these are not small sums of money.

In the practice to which I went—not an especially large one—the annual gross was approximately $8,000. Therefore, it cost me $12,000. Now as you can imagine, after serving five years with the RAF I had no $12,000, I borrowed the purchase price from the bank. The coming of the National Health Service Act—a vast system of government medicine—made this long established practice of buying and selling illegal. But it should be said in fairness that the doctors were not to be robbed of their practice value. A sum of some 264 million dollars was appropriated as compensation. Provided, and this is the vital proviso, provided that the doctor claiming compensation had entered the nationalized medical scheme on or before July 5, 1948, he would be reimbursed. It will be clear to you that in my personal case I stood to lose no less than $12,000—not even my own at that—should the scheme come into operation on the appointed day and my head not be there to be counted. And that story applies to almost every doctor in Great Britain. As the government claims, the doctors in Britain are 99 44/100 per cent pure.

As a general practitioner, I had registered with me, because of course in socialized medicine, we must have registrations; I had registered with me some 3,200 souls and this, believe it or not, was not the maximum. I could have had 4,000 and even more in certain exceptional circumstances. I challenge any of you listening to me to have even a conception of what is entailed in being responsible for the health of that number of people. In America there is one doctor for substantially less than a thousand persons. I used to do three one-hour office periods each day. And I could expect twenty people and more in one of these periods; that is an average of three minutes per patient. And I have made as many as thirty-six house calls in one working day in addition to my work in the office. You will, I am sure, appreciate what sort of medicine this is.

ACTIVITY UNDER EXISTING LEGISLATION

Public Law 658 of the 79th Congress, authorizing health programs for federal employes, attracted attention in the past several weeks. At hearings before the House Appropriations Committee the Federal Security Agency testimony indicated that in the City of Washington alone the Public Health Service operates a total of sixteen health services for employes of various government agencies. It will be recalled that under Public Law 658 (Ramspeck Act), a government department could request appropriations to establish a clinic to assist in the maintenance of good health for its employes. In setting up clinic services medical personnel from the Public Health Service could be utilized or private physicians and/or nurses might be employed directly, or the operation might be completely "farmed out" to the Public Health Service.

In testimony at the recent House Appropriations hearings, the program objectives were stated. "The maximum permissible cost of a health service would be $8 per year for employes to be served unless special industrial conditions or other abnormal health or accident risks exists . . ." The program includes treatment of on-the-job illnesses and dental conditions requiring emergency attention, pre-employment examinations, advisory diagnostic services, referral of employes to private physicians and dentists, treatment and medication with the consent of the patients' private physicians.

Following the hearings, President Truman ordered government agencies to "proceed as soon as possible" with the extension of on-the-job health services to a very large proportion of federal employes, including 200,000 in Washington, D. C., and federal employes in other cities with heavy concentration of workers and in such federal industrial establishments where the work is hazardous. His statement no doubt is meant to stimulate the already existing program and bring about uniformity among agencies. It could be used also as justification for appropriation requests.

PRESIDENT AGAIN ASKS HEALTH INSURANCE

In his budget message to Congress, President Truman again recommended enactment of compulsory health insurance and proposed a 0.25 per cent payroll tax on workers and employers, beginning January 1951, receipts to go into a government trust fund for financing of preliminary expenses in launching the vast program. The Bureau of the Budget estimated that this "overture tax" would raise $250,000,000.—*A.P. News* release.

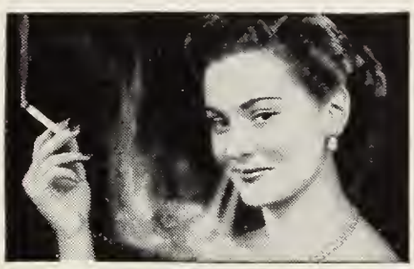
(Continued on Page 276)

DOCTOR, WILL YOU MAKE THIS NOSE TEST?

SEE AT ONCE PHILIP MORRIS ARE LESS IRRITATING

It is one thing to read published studies.* Quite another to have your own personal experience provide the proof! The PHILIP MORRIS nose test takes but a moment. Won't you try it?

HERE IS ALL YOU DO:



1 ...light up a PHILIP MORRIS

Take a puff—DON'T INHALE. Just s-l-o-w-l-y let the smoke come through your nose. AND NOW...

2 ...light up your present brand

Do exactly the same thing—DON'T INHALE. Notice that bite, that sting? Quite a difference from PHILIP MORRIS!

With proof so conclusive, would it not be good practice to suggest PHILIP MORRIS to your patients who smoke?

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* *Proc. Soc. Exp. Biol. and Med.*, 1934, 32, 241-245; *N.Y. State Journ. Med.*, *Vol.* 35, 6-1-25, *No.* 11, 590-592; *Laryngoscope, Feb.* 1935, *Vol. XLV, No.* 2, 149-154; *Laryngoscope, Jan.* 1937, *Vol. XLVII, No.* 1, 58-60

(Continued from Page 274)

S.2940 NATIONAL HEALTH ACT

Mr. Hunt, of Wyoming, January 30 introduced a bill to consolidate the health activities of the Government, to provide a program of national health insurance in order to make available to low-income groups medical services of the highest possible quality and in the greatest possible volume, and for other purposes. This was referred to the Committee on Labor and Public Welfare.

Comment: TITLE I—New department created. This would establish an executive department known as the Department of Health. The Secretary (member of the President's Cabinet) and the Under Secretary would be professional health workers with experience as practicing physicians or dentists. Four assistant secretaries experienced in the field of medicine, dentistry, sanitary engineering, or public health, would be appointed, and the fifth, the Assistant Secretary for Staff Services, would be experienced in administrative management. (None may have held office in a political party.) A special advisory board would assist the Secretary of Health and be composed of the Chief of the Office of Medical Services in the Department of Defense, the Federal Security Administrator, and the Administrator of Veterans' Affairs.* The *organization of the department would include* a Bureau of Medical and Hospital Care, a Bureau of Public Health Practice, a Bureau of Children's Health, a Bureau of Research, and a Bureau of Staff Services. The *duties of the new department would include* all the health activities of the present Federal Security Agency; promotion of more adequate local public health and medical- and hospital-care services in shortage areas, including the training of health and related personnel; administering a national medical-care program; increasing the use of nongovernment, private, and university physicians and dentists in providing care for Federal beneficiaries; improved planning and operation of Federal hospitals and the medical- and dental-care services therein to insure better integration with civilian hospitals and civilian medical and dental services; co-ordinating the Government's health care, public health, and health research activities; encouraging co-operation by units of the Department of Health with voluntary health agencies; promoting better civilian and medical care preparedness for defense; improving the co-ordination between military and nonmilitary medical and dental programs of the Government and co-operating in providing freer exchange of personnel between military and nonmilitary services; development of more centralized planning of nonmilitary medical and health programs of the Government; and furnishing the President and his Cabinet with information and assistance on vital problems in mental health and mental attitudes with reference to world co-operation for health and peace.

There would be transferred to the new Department of Health the following: the Public Health Service and the Food and Drug Administration of the Federal Security Agency; functions of the Children's Bureau concerned with Social Security Administration; the functions of the Social Security Administration pertaining to research in the field of health; the health functions of the Office of Vocational Rehabilitation; and the civilian hospitals in the Canal Zone under the jurisdiction of the Panama Canal; the dispensaries, clinics, health centers, laboratories and other facilities of the Department of Health of the Canal Zone; and all functions of the Panama Canal and such department of health in relation to the foregoing.

Regarding the *military and Veterans' Administration hospital programs,* the bill provides that the President shall appoint a non-partisan commission to make a study with a view toward recommending either the integration of such hospital programs with a hospital program of the Department of Health or the continued separate administration of such hospital program. The commission would report to Congress within 18 months.

The bill also calls for a continued study of all nonmilitary medical activities and recommends their transfer to the Department of Health if that course of action is desirable.

TITLE II—Part A—Shortage Areas—Would authorize $35,000,000 annually in federal funds to be administered by the National Health Insurance Board to provide grants and loans to medical personnel who practice or who desire an education in medical fields and will practice in rural or shortage areas; would make grants-in-aid in maintenance and operation of health centers; would make loans for construction of health centers, clinics and hospitals. Construction loans and grants to public or private nonprofit organizations are repayable to the United States in ten years without interest. Loans for construction and durable equipment made to private individuals are to be repayable in ten years with 2 per cent interest.

Part B—Would assist farmers expand health co-operatives and authorizes $10,000,000 for the first year and $15,000,000 annually for four additional years to be administered by the Secretary of Health after consultation with the Secretary of Agriculture for the purpose of assisting farmers' co-operatives in selecting rural areas to initiate and carry out plans for providing medical and dental care for their members.

TITLE III—Creates a voluntary national health insurance program to be administered by a *National Health Insurance Board* with the Surgeon General of the Public Health Service (representing the medical profession)† as chairman, and four members appointed by the President, one representing hospital associations, one representing dental associations, and two representing the public at large. Their salaries would be $15,000 per annum.

Insurance would be available to every person and his dependents who makes application in writing for coverage if the aggregate gross income of such individual and his dependents does not exceed $5,000 per annum. The *amount of premiums would be determined by the National Health Insurance Board.* Benefits would be paid (after the first $5) by the Board for medical, dental, hospital, nursing, laboratory, ambulance, and other services as the Board designates. Hospital expenses would be paid

*We object to the Federal Security Administrator's being on this advisory board. The cabinet member should be an M.D.—EDITOR.

†This appointee does not represent the Medical Profession. He is a Government officer committed to Socialized Medicine. The Medical Profession would be unrepresented.—EDITOR.

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Programs for Early Detection of Cancer

By Arthur A. Humphrey, M.D.

Battle Creek, Michigan

IN 1948, THE Cancer Control Committee collected data from the fifteen cancer detection centers then in operation in Michigan by the use of questionnaires and personal visits to each center. In addition to comparable statistical data obtained by the questionnaires, the visits were productive of accurate information which resulted in a clearer picture of the welcome the project had received in the community as well as its gain or loss in prestige since its inception. Since this time, the Cancer Control Committee has attempted a comparison of the average center with other means of cancer detection in current use in this state and elsewhere.

Many of the centers in 1948 were of such recent origin that they were still groping with their problems and altering their programs from week to week. It was quickly observed that there was no established plan of operation. A Cancer Detection Center Report recently made by the American Cancer Society, embracing ninety-six centers in the United States, also points out this lack of uniformity of operation. This is readily understood when the oldest center is twelve years old and 47 per cent has been in existence but two years. The endeavor of the American College of Surgeons, in conjunction with the American Cancer Society, to set up minimum standards of operation came late in 1947; however, since most of the centers had already been established in practice or at least in theory, they failed to conform fully to these suggested standards. Therefore, before further comment is made, it must be stated that most of the detection centers in Michigan are experimental in the sense that there are striking differences in their basic principles of operation, making for diametrically opposed plans of procedure and examination, with each group having its fervent proponents.

Certain facts appeared, however, which were obvious; thus, sponsorship appeared best when the center was operated jointly by the county medical society and the local branch of the cancer society; a hospital appeared to be the most economical location in the average community and the most practical outside of large cities; in small communities it was felt that something similar to the Hillsdale Plan was the answer; and it was the consensus that known, or highly suspicious, cancer patients should not be accepted at the detection centers but should be referred immediately to their own physician, emphasis being placed on the examination of the well or comparatively well individual whose symptoms, if present, did not otherwise cause him to seek medical attention.

In the Michigan survey a percentage of 1.2 cancer patients was found in 8,693 examinations in the centers; the American Cancer Society survey reported 0.8 per cent out of 51,728 examinations. Recent experiences indicate that in the future a lower percentage of positive cases will be found due to the depletion of the more symptomatic cases in the backlogs. Jones and Cameron (J.A.M.A., 135:964-967, 1947) pointed out two years ago that these percentages were much higher in the centers than the calculated expected frequency, due, said they, to the fact that the centers were acting as clinics and accepting patients who were not free from symptoms.

The cost of equipping and operating cancer detection centers varies from place to place. Those occupying hospital quarters with little or no over-

head for rent, light, equipment, heat, et cetera, demand less financial outlay than when the center is housed in rented quarters where all overhead and equipment must be paid for. In the Michigan survey, the cost per cancer case found varied from approximately $93 to $1,850, the average being $523. At a recent national conference on cancer detection centers, costs up to $6,000 per cancer case discovered were reported. Such costs make impractical the development of a state or nationwide detection program based on the procedures of the present day detection center.

The foregoing is a brief but necessary introduction to the accented purpose of this paper, that being to determine the scope of the examination which appears to be most practical and what ancillary procedures should be used, not only by the detection center staff but also by the practitioner in his office. In prefacing this, I might draw from a statement of Dr. Larkin of Connecticut, made in 1947, when he presented an analysis of detection centers up to that time, in which he stated that the annual examinations proposed for the early diagnosis of cancer by some enthusiasts would require the entire time of every physician in the United States and at an annual cost of one and one-quarter billion dollars. The accuracy of this statement has not been investigated but it is doubtful if it can be challenged on the basis that it is an overestimate. These statements reveal a very definite limitation to the development of any comprehensive detection program.

Lay proponents of the detection center have pointed with emphasis to the various remediable conditions uncovered by the general physical examination which were incidental and noncancerous findings. When I have failed to share this enthusiasm and have pointed out that this was not the function of the detection center or the cancer organization in general, for the society would dissipate its efforts if it embraced all diseases, I was usually greeted with chilly doubt. If I advised that medical men were naturally opposed to "free" general clinics for non-indigents suffering from various disorders, the proponents retired in shocked silence. Parenthetically, the detection program has unwittingly become a prominent and favorable factor in public relations when the need is great.

In the related field of laboratory procedures, a urinalysis is done in most of the Michigan centers but routinely in only two-thirds of the ninety-six reported in the national survey. Blood counts were performed in many of the centers but on only a few are they complete. Tests for syphilis are done in a lesser number. Chest x-rays are rarely done in Michigan centers but were reported in 44 per cent of those in the national survey as a routine measure.

It is agreed that, except for experimental purposes, extensive x-ray studies are beyond the scope of the detection center. Biopsies are occasionally performed, but the consensus is that they are the function of the cancer diagnostic clinic and have no place in the detection center. Vaginal smears for cytological study were taken in 50 per cent of the centers in the United States but infrequently in the fifteen centers in Michigan. Their limitations are the subject of so much controversy that they can be considered only a screening procedure in selected cases.

In one Michigan detection center in 1948, the general physical examination was discontinued for several reasons and a modified one adopted. It was observed that the amount of time consumed by the general physical examination resulted in less attention being given to the common cancer sites. By limiting the examination to essentials far more examinees could be taken in a session to lessen the much-criticized backlog. Further, it was obvious that too many individuals with noncancerous diseases, and in many instances undoubtedly aware that their symptoms were not of a cancerous nature, were taking advantage of the general examination. In many instances, these persons previously may have had an annual examination by their own physician or would have gone spontaneously to their own physician when symptoms developed.

The fact that the history and physical examination were exceptionally complete when submitted to the physician of the patient's choice left this doctor very little opportunity to do anything for the patient except to verify some of the findings and suggest treatment. I am aware that this procedure of forwarding the examination data to the physician of the examinee's choice is not universal but makes the evil no less apparent.

At present, the examination in this center is limited to a history and the following salient cancer areas: oral cavity, skin, breasts, abdomen, thyroid, lymph nodes, rectum and female pelvis, so that it becomes definitely an examination for cancer alone. Such time-consuming procedures as examination of the heart, lungs, ears, eyes, reflexes and blood pressure readings have been omitted.

Through the co-operation of the county tuber-

culosis society, miniature x-ray films are now routinely taken, and it is obvious that, by this method, far more early pulmonary cancers will be detected than by physical examination of the chest. If anything is observed on the small chest films, the examinee is referred to a roentgenologist for a more complete study and who, in the absence of a tuberculosis society x-ray unit, can make miniature chest films on all patients.

The possibility of a thorough physical examination disclosing one of the ultra-rare tumors of the heart or a cancer influencing blood pressure readings is so remote as to scarcely deserve comment.

The laboratory examination, in addition to the miniature chest films, consists of a hemoglobin determination, test for syphilis, and urinalysis. The urine examination consists only of sugar, albumen, and microscopic or chemical tests for blood. If the hemoglobin is low, the patient should be referred to a hospital or other laboratory for a complete blood study. It would appear that the omission of blood studies, other than the hemoglobin determination for anemia, would result in failure to recognize cases of leukemia. This, however, was not the case in the national survey, where only one case of leukemia was encountered, although 57 per cent of the centers performed blood counts. It might also be pointed out that the end result in the treatment of leukemia, early or late, is the same, and the efforts of the center should be directed toward those types of malignancy where early detection promises some chance of a cure or at least palliation.

In some centers, the examination of the stool for occult blood is considered a valuable laboratory aid and is probably warranted when one considers the simplicity of the procedure. If positive, the sources of error in this test should be reviewed by referral to an internist who will weigh the advisability of further x-ray studies.

Omitting a detailed account of the findings of the various surveys, it was generally observed that practically all the cases discovered were in accessible sites and early detection could assure a high percentage of curability. On the other hand, cancers of internal organs have a very low rate of cure, with few exceptions, and failure to perform a complete physical examination would appear to make little difference. Since it is apparent that an ideal and comprehensive detection program is impossible because of the lack of trained workers, physicians, and the excessive cost, it seems practical to concentrate early detection on those sites that can be examined visually or by the palpating finger.

When one considers only the detection of lesions in accessible sites, the patient's history does not share the importance usually attached to it by the medical profession. It seems advisable to have a brief history taken by nurses rather than to burden the physician who later will check the more important points. The national survey even recommends a check list type of history form to be filled out by the examinee, a procedure which has proved of value in various medical school clinics.

Although the facts adduced by the two surveys reviewed in this paper reveal the inability of the cancer detection center as now organized to provide a competent service to more than a small percentage of the population in any community, these undertakings have made definite contributions to the control of cancer in their areas and by example to many other areas. For this, they are entitled to the fullest credit. Probably their outstanding value has been that of arousing in lay persons an appreciation of the value of the periodic medical examination in the absence of signs and symptoms of disease.

Whether cancer detection centers, as such, continue to function will depend on their ability to render a satisfactory service to a vastly increased number of people. In the last analysis, the value of the examination for cancer detection, either in the center or the physician's office, will depend not on environment, equipment or procedure but will be determined by the ability, training and experience of the physician making the examination and interpreting his findings.

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"SOCIALISM" EMERGES AS CAMPAIGN ISSUE

Senator Byrd (D., Va.) voiced the first Democratic criticism of President Truman's Jefferson-Jackson dinner speech.—Free Press Wire Service, February 18, 1950.

The Virginia senator, who has opposed the President's spending program, said the country will be "irrevocably committed to socialism" if three administration proposals are adopted by Congress.

He listed these as the "socialized medicine" of the compulsory health insurance plan; the "socialized agriculture" of the Brannan farm subsidy payment plan and the "extension of socialized housing."

"Add these to the President's public embrace of chronic deficit-spending and you have a non-stop, high-speed highway to socialism, with or without an insulted intelligence," Byrd said.

Lay Interest in Cancer

By Donald E. Johnson
Past President, Michigan Division
American Cancer Society

Flint, Michigan

BEFORE DISCUSSING the assigned subject, "Lay Interest in Cancer," it might be well to ask ourselves the question, "Is there a lay interest in cancer?"

Obviously, the answer is "yes." The attendance at today's conference of so many lay workers, who represent hundreds of others in the nonprofessional group, is evidence of a kind that can be multiplied many times in our state and nation. Every day in the year, in practically every community and throughout the rural areas of our country, thousands of lay workers have taken up the cancer fight. They have marshaled their resources and pooled their efforts—determined to carry on with the limited weapons that science has provided for the battle.

Back of these workers are the many thousands of homes where the cancer story has been told, either by cancer itself or by the little pamphlet that came from school or through the mail or the newspaper or magazine article.

And those of us in business, we have a deep interest. We know what cancer can do to a staff that has been trained and built up over a period of years.

Yes, the evidence can be piled high and facts more than justify us in accepting the statement that there *is* a lay interest in cancer.

For thousands of years, the nature and causes of cancer were a closed book to the lay and professional world. Gradually through the years, the book has been pried open through scientific investigation, with many willing hands aiding. While much knowledge has accumulated about many cancer problems, the final chapter in the cancer book has not been reached, as we all know.

Today, an ever-increasing number of laymen, so far as they are able, are applying the newer knowledge about cancer to the protection of their families and themselves. However, the number must be greatly increased before much progress can be made in reducing cancer deaths. There has been a marked increase in the layman's awareness of cancer hazards, and this is all to the good. But there has to follow a response in the form of direct action on the part of the layman to do those things which he has accepted as necessary to be done if cancer control is to become an effective, living program.

Cancer workers are thus presented with a prime objective—cancer education must be carried to *all laymen everywhere.*

The great majority of today's cancer patients are in an advanced and incurable stage when they first seek medical aid. The high mortality from the disease can be attributed, in large part, to the many false beliefs regarding cancer which cause delay in seeking medical attention. These beliefs must be eradicated by expanding and intensifying the cancer education program.

Cancer control is not a one-man job, nor a one-man show with backstage support. Neither the layman, the physician, nor the scientist in his laboratory can do the work alone. There must be a community of spirit and there must be teamwork.

Laymen must appreciate the fact there is no short cut to cancer control. We travel a long path that has already taken us around and over many obstacles, and the distance ahead is still unknown. But of this we are sure—we are going ahead on the only path that science has been able to chart, and, it being the only path, we must travel with determination.

It has been pointed out with emphasis that the community control of cancer is the sum of control in individuals. How true!

If we, as individual laymen, do not realize that we must make the first move in protecting ourselves by applying to our own physician for an examination to confirm the absence or detect the presence of cancer, then to what avail is a cancer control program? The key to control is with the individual.

If cancer is detected, the layman has an additional duty. He must co-operate in all treatment and follow-up measures found necessary. Otherwise, an early diagnosis will be without avail and the control program becomes a program without results.

Laymen must also realize that no matter how great their own interest in cancer may be, the physician has all diseases to consider in his daily work. Cancer, as a problem in itself and in the patient, has to be examined by the physician within

Presented at the First Cancer Conference of the Michigan State Medical Society, October 11, 1949, at Lansing, Michigan.

the limits of time at his disposal. So it becomes reasonable to suggest that cancer programs should be organized to claim only their fair share of the professional services available.

A physician is well aware of the tremendous scientific and social problem that cancer presents. In his time and in his way, he faces it with courage, skill and patience. He will never accept defeat. For this, our thanks and praise.

It might be presumptuous for an ordinary layman to suggest the part a physician might play in cancer control, so we advance cautiously for a minute or two.

First, physicians must accept the responsibility for educating the public. Laymen will help and supplement wherever and whenever possible, but over-all guidance and responsibility must come from the physician.

The professions have provided laymen with a wealth of cancer educational material. In printed form, some of the material has been splendid, some of it good and some of it not so good. Whatever its quality and appeal, it has been passed on to the public by all means available. For a while, the educational program on the community level was on what might be termed a scatter-shot basis, with information being tossed out here and there—with no particular pattern in mind. There was always the hope that someone would be hit by a catch-phrase or a fact that would arouse his interest in cancer.

Recent years, however, have brought a change in this plan, and we now find our educational program being specifically directed at groups as well as individuals, all according to a plan and pattern that experience has proved to be the most effective. The physician has helped to bring about this change, but we must expect more assistance, advice and guidance if we are to accomplish the desired goals.

Second, the physician must be sympathetic, understanding and patient with the layman who expresses or shows an interest in cancer. He must realize that a question about cancer from a layman does not brand the inquirer as a "cancerphobe," but rather does it indicate a sincere desire of the individual for further information on this subject.

And third, with the layman's increasing knowledge of, and interest in, cancer, the physician, too, should keep abreast of advances in diagnosis and treatment in order to render the best service to his patients. In Flint we are particularly proud of our medical society which has carried on a continuing program of cancer education for its members. The annual Cancer Day sponsored by the Genesee County Medical Society has assumed national importance in cancer teaching and brings authorities in the field from all sections of the nation. Similar educational opportunities are regularly offered to physicians in other sections of the state.

With the layman and the physician joined in a great cause, what should be the direction of their efforts? From a careful analysis of the general problem it would seem that the greatest general contribution that can be made to the control of cancer at this time is a greatly expanded lay education program—a program definitely directed at, and reaching, both high school and adult groups.

If we are to hope for anything at all in cancer control, we must have more cancer education—even at the expense of curtailing services to the cancer patient. Persons charged with responsibility for disposition of cancer funds must not be too greatly influenced by the sympathetic appeal which is found in direct service to the cancer patient as this type of service contributes little or nothing to the prevention or control of cancer or to the cure of a cancer patient.

The most significant personal contribution a layman can make to cancer control is to have a periodic medical examination by his own physician. Cancer in its early stages—where the percentage of cure has shown marked increase—can never be discovered in any other way. Better a dozen negative examinations than neglect one when cancer could have been found in an early stage.

A program that offers such an examination to the largest percentage of the population at the least cost will make the greatest contribution to the control of cancer in any community. Convincing proof of the value of such a program has been presented at this meeting. We also have had convincing proof that the layman must be part and parcel of the program.

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Primary adenocarcinoma of the vagina is rare.

* * *

Serum amylase was elevated in one-third of thirty cases of carcinoma of the head of the pancreas.

* * *

Leukemia tops the list as the most common type of fatal cancer in children.

* * *

Estrogens should not be given to any one with a family history of cancer.

Effective Cancer Control

Charles S. Cameron, M.D.,
Medical and Scientific Director
American Cancer Society
New York, New York

NOWHERE in the world do voluntary health agencies flourish in such abundance as they do in the United States. They are an expression of the charitableness of our people toward those less fortunate, and they are testimony to the democratic spirit of Americans in organizing and working cooperatively for the common good.

The American Cancer Society, a venerable member of the family of health agencies, should be thoroughly known to all doctors for its services are many. Through its national office in New York, its sixty-one chartered divisions and 2,613 county branches, it conducts a broad-based year-round effort to control cancer, one of the foremost medical problems confronting us.

The control of cancer eventually will come through an understanding of cancer's causes, means of prevention and effective treatment methods; this knowledge waits on research. The Society has recognized the importance of intensified investigative efforts in the field of growth and spends 25 per cent of its income in the support of such studies and in the training of young scientists to carry them forward. During the present year this support amounts to $3,500,000. The total research expenditure for the past five years is $13,153,560.

A substantial measure of control over cancer can be achieved today with the knowledge already at hand. The disparity between cancer's *curability* and the cures being achieved is striking. For example, cancer of the breast is curable in 80 per cent of patients who are treated when the disease is confined to the breast; yet the country-wide cure rate is less than 35 per cent. When cancer of the rectum is confined to the mucosa, cure rates of 70 per cent have been reported; yet the overall rate of cure is about 11 per cent. Similar differences hold for most forms of the disease. In order to achieve a larger measure of cures, the American Cancer Society engages in an intensive educational and publicity campaign, based on knowledge of cancer's early signs and symptoms (the Danger Signals), and the value of periodic physical examinations.

April is the month when the American Cancer Society makes its annual appeal to the public for support of its programs. As more and more of our people live longer, the incidence of cancer increases. As the problem becomes more widespread, so must the effort to control the disease be intensified. The Society is dedicated to the principle that through education an effective measure of cancer control may be achieved at this time.

Improved services to patients with cancer are provided by support of cancer clinics, organized programs of cancer detection and information services; these efforts are augmented by a corps of volunteers who provide loan closets, transportation services, recreational activities and dressings.

Of immediate interest to doctors is the professional education program. During the past year, three monographs of a series dealing with cancer by anatomic site have been distributed to practicing physicians throughout the country. The series will be continued this year, with distribution at three-month intervals.

The professional journal *Cancer,* which first appeared in May, 1948, has been well received by clinicians and investigators interested in the problems of abnormal growth. A series of motion pictures for professional audiences, treating the problems of early diagnosis of cancer by anatomic site, has been outlined. Two of the films have been released, the first concerned with the general problem of the early diagnosis of cancer and the second concerned specifically with the early diagnosis of cancer of the breast. A third, covering cancer of the gastro-intestinal tract, is in preparation and will be released this year.

A new publication of the Society will appear this year, and will be distributed bi-monthly to practicing physicians throughout the country. Topics of interest to the general practitioner will be presented in digest form, together with brief abstracts of significant papers appearing in the literature. Clarity, brevity and general interest will be stressed. It is the Society's hope that this digest will be accepted by the busy physician for whom it is planned.

The library of the Society publishes monthly a bibliography of the current cancer literature which is available on request to physicians, research workers and libraries. The library will prepare, on request, bibliographies on any topic related to the field of cancer. A package lending library has been established which will supply reprints, on a loan basis, to any physician or investigator requesting the service.

Cancer Control in Michigan

By Norman F. Miller, M.D.
Chairman, Cancer Control Committee
Ann Arbor, Michigan

NO ONE NEEDS to be told that the control of cancer is a big problem. Indeed the word "cancer" is a broad term which includes a large group of diseases. The many far reaching clinical and research aspects of these diseases are of tremendous importance but, for the most part, lie beyond the scope of our discussion here today. It is our desire to limit the scope of this meeting to consideration of ways and means for greater use of long recognized, thoroughly proved, realistic and readily available means for cancer control. By so doing we may reasonably hope to see the high mortality from the more common forms of cancer practically wiped out. This is *not* idle talk; it is *not* propaganda. It *is* the time-proven conclusion of innumerable cancer workers throughout the world and offers to all of us a practical program for cancer control. Let us look hopefully at research promises for the future but at the same time let's not overlook the sure means which now lie at our feet for reducing cancer mortality tenfold.

At one time in world history the prototype of the undertaker was the only person who could do anything for the cancer patient. Then, with the development of medical endeavor, the physician came into the picture where he has since remained the one most concerned with the cancer problem. But today we recognize cancer as something more than a medical problem. It is also a social, an economic, and an educational problem. Recognition of these wider ramifications of the cancer problem are neither new nor universal. The American Cancer Society and many medical organizations, including the Michigan State Medical Society, have for years assiduously pursued educational programs. While full credit should go to these organizations for their pioneering and telling accomplishments, they are not enough. That is why we are asking you and the organizations you represent to join the fight against cancer in Michigan. But the development of a statewide cancer detection service, by making every doctor's office a cancer detection unit, will accomplish little unless the service is utilized, and it is here that you can accomplish the greatest good and make your influence felt to best advantage.

If our combined forces can be co-ordinated to fight cancer by means available today, then I have no fear of contradiction in stating that deaths from many of the more common cancers will be reduced tenfold; that death from certain cancers will be practically eliminated, and all this with means now available for our use. To deal cancer such a telling blow, however, can only be accomplished by the combined effort of every organization completely or even remotely interested in health matters. There *must* be acceptance of a common objective; there *must* be clear understanding of the part each of us shall play, and there *can* be no wasteful dispersion of effort.

Since I assume that we *are* willing to unite, to combine our efforts the more effectively to fight this common enemy, let me restate our objective and make clear the part we each can play in this renewed attack against the killer in our midst.

Earlier on this program you were told about the cancer situation in Michigan; about our evaluation of cancer detection centers in Michigan. You were also told about the Hillsdale Plan for Tumor Detection and how it works. The layman's part in this program has also been ably presented. Let every interested person reread these reports, copies of which have been made available. Since prevention of cancer by the elimination of precancerous conditions and by detection of cancer in an early readily curable stage are today the surest means of reducing deaths from this source, it is obvious that actual achievement of the long advocated periodic examination, the cancer detection examination, must be made an accomplished fact.

Our aim then is *periodic health examination for every adult in Michigan at reasonable cost, to the end that cancer may be detected in an early curable stage, or better, prevented by the recognition and elimination of precancerous lesions.* Since the Hillsdale Type Plan of Cancer Detection, wherein every doctor's office becomes a detection unit, is today the most suitable means yet devised for obtaining this service, its statewide adoption becomes a major part of our objective. This plan need not interfere with, or disrupt existing facilities for cancer detection, but its statewide adoption, both in principle and practice, will mark the beginning of a new era in cancer control.

It may be of interest to this group to know that, at a conference called by the American Cancer

Presented at the First Cancer Conference of the Michigan State Medical Society, October 11, 1949, at Lansing, Michigan.

Society in Portsmouth, New Hampshire, in September, 1949, and attended by approximately seventy-five physicians and other cancer workers from all over the United States, the place of cancer detection centers in the cancer control program was discussed. At the conclusion of the conference the following principles among others relative to detection centers were adopted. I quote:

"Experience has disclosed the fact that Detection Center Examinations on all citizens are not practicable."

"At the same time, it is recognized that a large section of the public does visit a physician at least once annually. If such physicians will perform official physical examinations on all patients, it is reasonable to expect that most accessible cancers in such persons will be diagnosed at a much earlier stage than in the past with corresponding increased probability of cure. . . . In brief, it is suggested that every physician's office or clinic become a 'Cancer Detection Center.' "

Doctors are busy caring for sick people, and the addition of periodic health examinations to their already crowded schedule means additional burdens and responsibilities which in some cases may be difficult to meet. Indeed, were cancer detection examinations requested by a majority of the adult population, many more physicians would be required to carry this added load. However, it is not likely that, as a consequence of our deliberations here today or the efforts which you and your organizations may later make, doctors will be overwhelmed by these requests. It is far more probable that both the demand for this service and the means for providing it will develop gradually over a period of years. Much has already been done by way of acquainting physicians with this plan and many counties in Michigan and several other states have adopted some form of the Hillsdale Plan suitable to their own communities. But it is not enough merely to set up the machinery whereby cancer detection examinations may be made available to the greatest number at the lowest possible cost. Much more is needed and it is here that you and the groups you represent can make your interest felt.

On the surface it may appear that we, as individuals, here gathered for the purpose of reviewing and renewing the fight against cancer, can do little more than is already being accomplished. Fighting cancer is serious business and sober recognition of the enormity of our problem is better than a flush of optimism which, like the first blush of spring, passes all too quickly. The small army of potential cancer fighters gathered here today represents the advance guard of a vast army—the citizenry of Michigan—whom you represent. Let us now see where we—each and every one of us—come into the picture. What can you and the organizations you represent do to help wipe out cancer mortality in Michigan?

Specifically it is to be hoped that you will do the following:

1. Interest your organization in this renewed fight against cancer sponsored by the Michigan Cancer Control Committee representing the Michigan State Health Department, Michigan Divisions of the American Cancer Society and the Michigan State Medical Society.

2. Have periodic health examinations yourself

3. Urge and continue to urge your friends to have similar examinations.

4. Make cancer detection a part of every regular medical examination now required by your employer or organization. Pre-employment and periodic physical examinations have become a reality in many industries. These examinations must be expanded to include specific cancer detection.

5. Assist in creating a unified local cancer detection program in your own community.

Lest you look upon this as duplication of effort on the part of organizations specifically concerned with cancer, let me point out that this is an urgent invitation from all these organizations that you too put your shoulder to the wheel and help in the fight against a common enemy.

But, and this is important, in so doing, it is not only desirable but necessary that we pull together. There must be unity of purpose without wasteful duplication and dispersion of effort. It has been a simple matter to tell about our aim for the future but bringing it to full fruition requires a unified and co-operative effort. All of which brings me to the second important way in which we seek your co-operation.

The Michigan Cancer Control Committee is presently composed of physicians representing the three organizations primarily concerned with the control of cancer. This is as it should be. However, cancer is your enemy as well as ours. Cancer is a social and economic problem as well as a medical problem. As a means of furthering our attack and uniting our efforts it seems highly desirable that

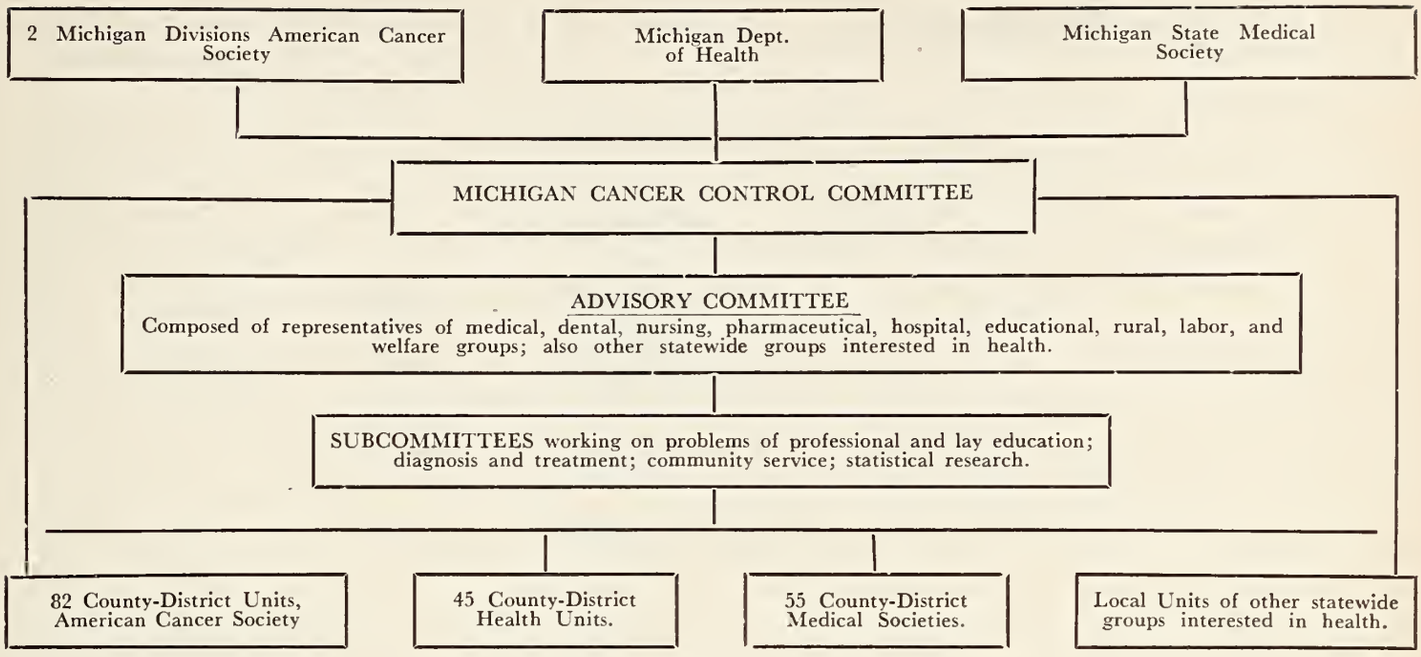

Fig. 1.

we not only consider the calling of future cancer conferences wherein we may review work done and strengthen our attack but further that we develop an interim advisory group or committee fashioned about as indicated in Figure 1.

No one on the present Cancer Control Committee is masquerading under the assumption of knowing *all* about cancer and cancer control. We are, therefore, asking your assistance in an advisory capacity and hope that you, or other duly appointed representatives of your organization, will be willing to meet with the Cancer Control Committee, perhaps once or twice a year, for the purpose of clarification and unification of aims and objectives as well as the discussion of problems not now considered or even recognized. While the plan presented in Figure 1 appears simple enough, its actual capacity for usefulness will in large measure depend on your willingness to participate. Specifically, and for the time being, it is requested that a representative of your organization be appointed to meet in an advisory capacity with the Cancer Control Committee for purposes already stated. The name of the representative should be filed with the Secretary of the Cancer Control Committee at 1313 E. Ann Street, Ann Arbor, Michigan, as soon as possible, so that he or she may be notified of combined committee meetings.

The purpose of today's conference has been severalfold. We have presented data regarding several aspects of the cancer problem. We have stated that the cancer mortality can be reduced tenfold by means now at our command, and finally, we have requested your co-operation and the support of the groups you represent. We hope we have laid the foundation for the greatest and most powerful drive against a common enemy to be found in the entire world today. If you accept our invitation to join in this fight, it is well within the realm of possibility that Michigan will, in time, have the lowest cancer mortality of any state in the Union. We request and welcome your co-operation.

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"The Administration says to the medical profession: 'Fear us not! We would not socialize medicine. Only give us control of your medical schools and of your research centers! We offer gifts to students and professors (especially pediatricians). Come, follow us down the primrose path to our Federal Utopia! It is much easier for a student to take "easy money" from Washington than to learn how to stand on his own feet. Under our Plan he will never need to be independent and self-reliant because we will take care of him—permanently.'

"Thinking people . . . are realizing that administration proposals must be fought on a united front. Now when a Federal bill is up for debate, the medical profession has nothing to say in opposition unless medicine is directly affected. If it is a bill calling for public ownership of utilities, most doctors say: 'Let the public utilities people worry about that one. We don't want to spoil our public relations by opposing everything.' Similarly, the electrical industry lets medicine worry over compulsory health insurance. They'd better get together."

—AMPS

The Cancer Problem in Michigan

By C. J. Poppen, M.D.
Chief, Cancer and Adult Health Services
Michigan Department of Health
Lansing, Michigan

CANCER IS one of the oldest diseases known. Reference is made to it in one of the earliest medical writings known to Egyptians five thousand years ago. Hypocrates, a Greek, named it five hundred years before Christ. The Romans translated it to the Latin word "Cancer" meaning crab.

In the past, due to the lack of facilities for studying cancer accurately, little headway was made in understanding the nature, causes and control of the disease. Misinformation and fallacies were handed on from one generation to the next so that the public attitude toward this disease has been fixed definitely in erroneous channels through hundreds of years. Many of these erroneous ideas still persist and form the greatest obstacle to the control of this condition.

Facilities for studying cancer have been greatly improved during the last half century, so that today more is known about the nature and the cause of this condition than ever before. Each new scientific fact about cancer offsets some preexisting fallacy, so that the public is no longer justified in maintaining an attitude of hopeless fear that is doing so much to retard the application of effective control measures. Enough is known about cancer today to make possible the saving of thousands of lives if people only knew and used these facts for their protection.

For many years, cancer control programs have been conducted in Michigan by the two divisions of the American Cancer Society, the Michigan State Medical Society and its county societies, and state and local health departments with the assistance of the United States Public Health Service. Research studies in cancer have been under way at some of the colleges, both universities and in hospitals and other institutions in the state.

All of these activities have been beneficial to the people of Michigan in different ways. They have aroused the interest of intelligent laymen in protecting themselves against cancer. They have provided postgraduate education for the physicians of Michigan through special cancer programs. They have extended the lay education and service programs to an ever widening circle of the population, providing better understanding of the cancer problem and measures necessary for its more adequate control.

TABLE I. RANK, NUMBER, AND RATES OF THE TEN LEADING CAUSES OF DEATH IN MICHIGAN
1948 Compared With 1900

Cause of Death	1948	Number 1948	Number 1900	Rates* 1948	Rates* 1900
Heart Disease	1	18,726	2,836	302.3	117.1
Cancer (with Leukemia and Aleukemia)	2	3,261	1,495	133.4	61.8
Cerebral Hemorrhage	3	5,176	1,259	83.5	52.0
Accidents	4	4,017	1,740	64.8	71.9
Nephritis	5	2,473	1,061	39.9	43.8
Pneumonia	6	1,853	2,388	29.9	98.6
Premature Birth	7	1,820	620	29.4	25.6
Diabetes	8	1,771	224	28.6	9.3
Tuberculosis	9	1,561	2,478	25.2	102.4
Arteriosclerosis**	10	1,085	98	17.5	4.0

*Rates are per 100,000 estimated population.
**The 1900 figure refers to "Diseases of the Arteries."

While Michigan has a constructive cancer program, the results so far reveal the need for greater effort in this field. To accomplish this, the Michigan Cancer Control Committee, composed of representatives of the two Michigan divisions of the American Cancer Society, the Michigan State Medical Society and the Michigan Department of Health, has called this first Michigan Cancer Conference.

Cancer is now the second cause of death in Michigan, being surpassed only by deaths due to heart disease. At the beginning of the century and perhaps even later, cancer occupied eighth place as a cause of death but it has since moved progressively in the direction of increasing importance. This shifting of emphasis is the result of a number of factors; one obviously being the increasing control over the infections of tuberculosis, pneumonia, typhoid fever, communicable diseases of childhood, diarrheas and enteritis, which were all among the leading causes of death fifty years ago. We didn't know then that these diseases could be controlled and conquered. We hadn't the courage to say that they could be because we hadn't seen it demonstrated. What can be done where there are earnestness, clear thinking, and facilities is now history. We are in a similar position today with reference to cancer. There are plenty of enigmas and difficulties, but they will be removed if we mean business. We are in the era of cancer control.

The scope of the problem in Michigan is tremendous as shown by mortality reports. Studies

Read at the First Cancer Conference of the Michigan State Medical Society, Lansing, Michigan, October 11, 1949.

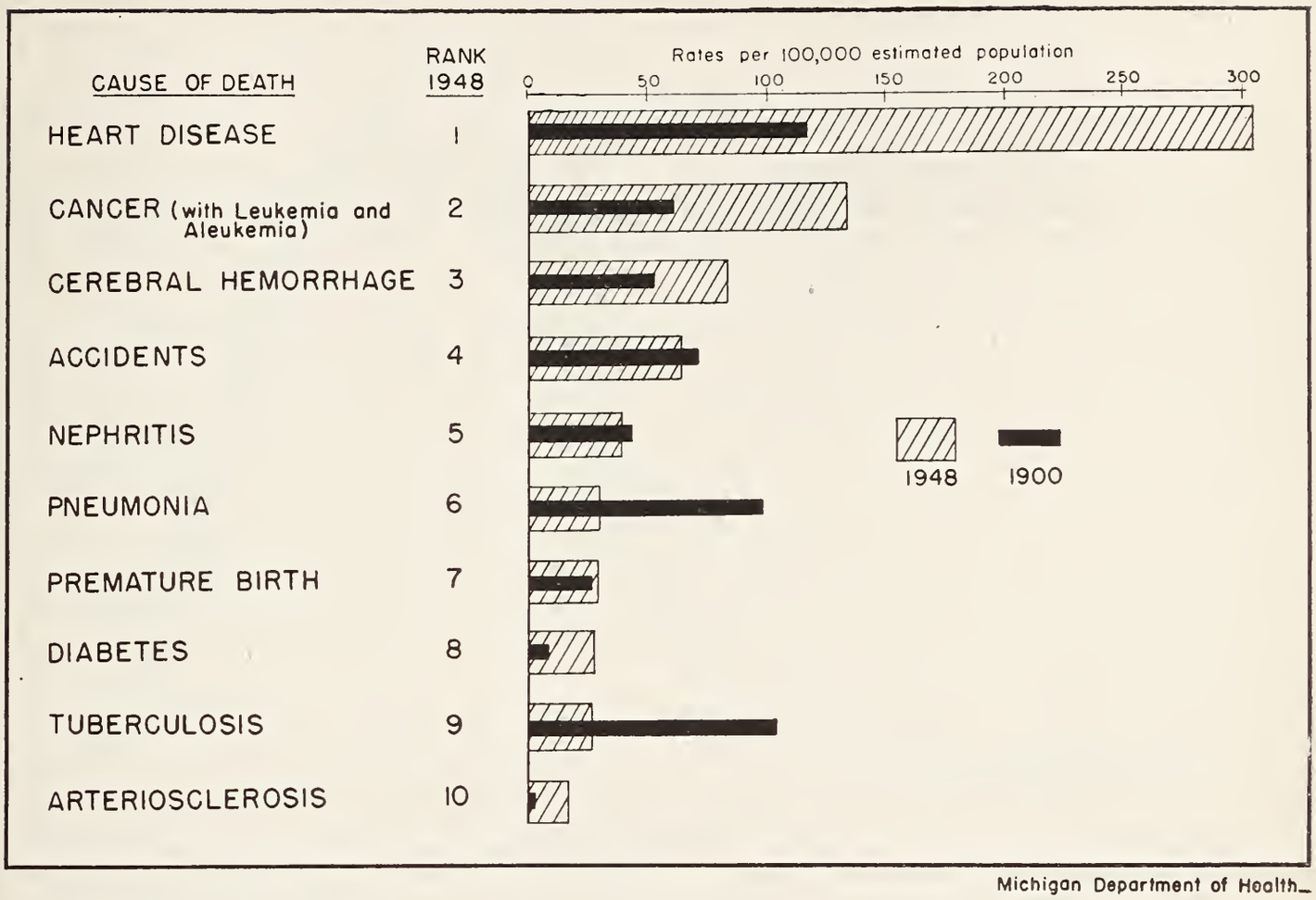

Fig. 1. Number and rates of the ten leading causes of death in Michigan in 1948 compared with the same causes in 1900.

reveal there are more than three living cases of cancer for each reported annual death. Applying this ratio of 3 cases per death, there was a total of over 25,000 cases of cancer in Michigan in 1948. These figures represent the minimum, and the actual existing number of cases is probably greater than the number of cases computed through reported deaths.

The increasing significance of cancer as a cause of death in Michigan is shown in Table II.

TABLE II

Michigan		
Total Cancer Deaths	Rate per 100,000	% of all Deaths
1928—4249	92.4	7.8%
1938—6059	117.1	12%
1948—8336	133.4	15%

Every decade shows a greater probability of death from cancer. In 1928, ninety-two out of each 100,000 population died from this disease. These figures increased to 117 in 1938 and to 133 in 1948.

While the total number of deaths yearly for the period 1938 through 1948 has remained fairly constant, the number of cancer deaths has increased from 6,059 to 8,336. Cancer accounted for 8 per cent of all deaths in Michigan in 1928, 12 per cent in 1938, and 15 per cent in 1948.

This increase in cancer death rate can be attributed in part to two causes: (1) each year an increasing percentage of the state's population is found above age thirty when cancer is more likely to develop, and (2) scientific methods of diagnosis are being improved so that more abnormal conditions are being recognized as cancer than ever before. Many believe that there is an actual increase in the number of people affected each year.

The chances of dying of cancer in Michigan in 1948 by specific age periods in both males and females is shown in Table III and Figure 2. This table and chart show that, while no age is free from cancer, such deaths increase with advancing age. Up to age thirty-five, but 4.4 per cent of cancer deaths occur. The percentage of deaths in females begins to rise sharply at age twenty-five, reaching its peak at age sixty-five, while the beginning of the sharp rise in males is at age thirty and continues to age sixty. After these ages the

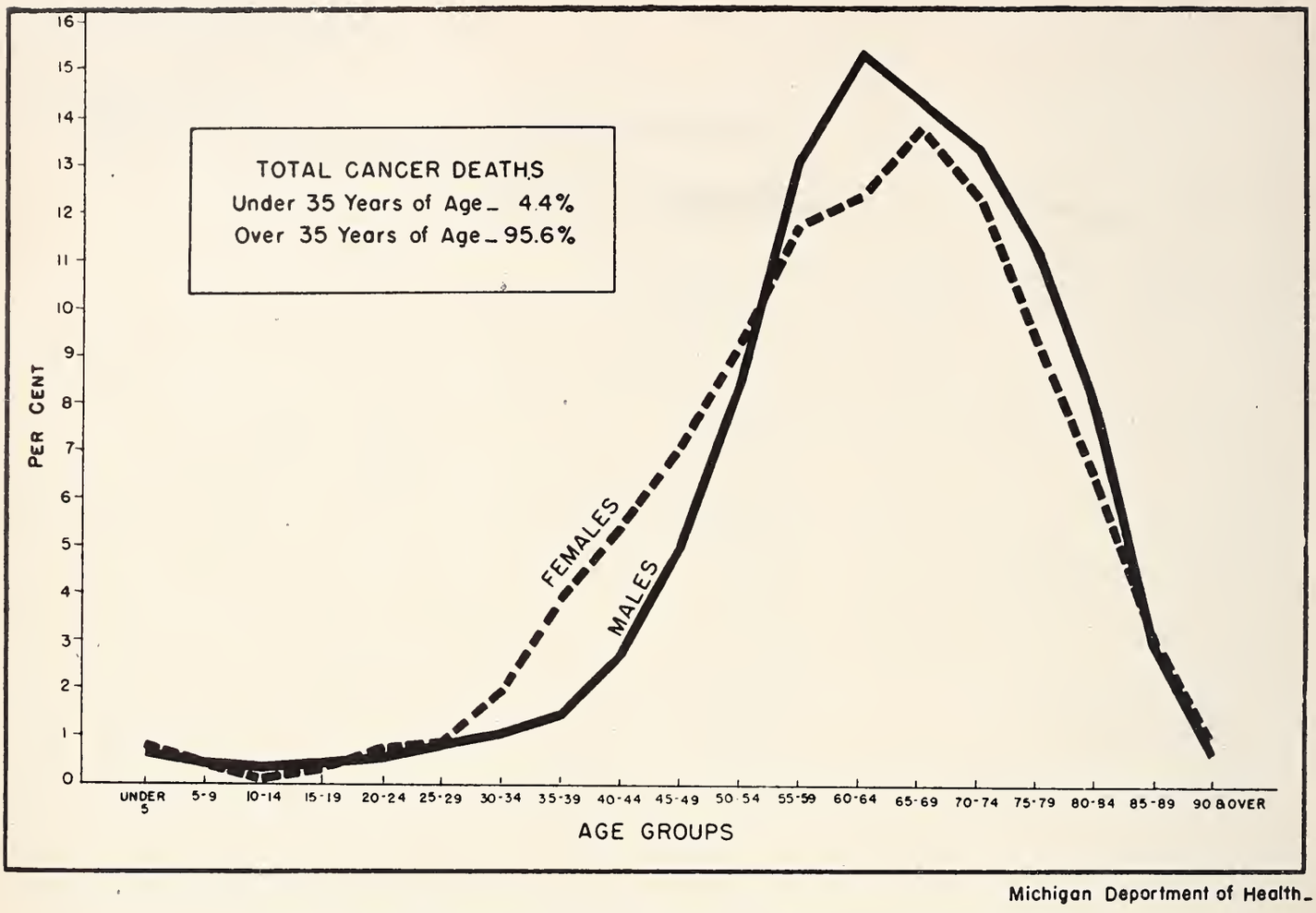

Fig. 2. Percentage distribution of cancer deaths by age and sex in Michigan in 1948.

TABLE III. PERCENTAGE DISTRIBUTION OF CANCER DEATHS BY AGE AND SEX MICHIGAN—1948

Age Groups All Ages	Total 100%	Male 100%	Female 100%
Under 5	0.7	0.6	0.7
5— 9	0.3	0.4	0.3
10—14	0.2	0.3	0.1
15—19	0.3	0.4	0.3
20—24	0.6	0.5	0.7
25—29	0.8	0.8	0.8
30—34	1.5	1.0	1.9
35—39	2.6	1.4	3.9
40—44	3.9	2.6	5.3
45—49	5.9	4.9	7.0
50—54	8.7	8.3	9.2
55—59	12.5	13.2	11.7
60—64	13.8	15.3	12.3
65—69	14.2	14.3	13.8
70—74	12.8	13.3	12.3
75—79	10.2	11.1	9.3
80—84	7.2	8.0	6.4
85—89	3.0	2.9	3.1
90 and over	0.8	0.7	0.9

percentage of deaths in each sex falls rapidly because there are fewer persons living in the older age groups. Were the percentage of deaths in older ages based on the number living in each age group, the curves would have continued to show an ever sharper rise. When charted on a larger scale, deaths under age twenty are shown more nearly in keeping with their importance in relation to cancer deaths as a whole.

TABLE IV. NUMBER OF DEATHS UNDER AGE 20 MICHIGAN—1948

Cancer, Leukemia, Hodgkin's Disease	Tuberculosis	Acute Rheumatic Fever	Diphtheria	Measles	Poliomyelitis	Scarlet Fever	Syphilis	Whooping Cough
132	88	20	7	43	33	1	14	9

Contrary to popular belief, cancer claims a considerable number of lives under the age of twenty. In 1948, there were 132 such deaths. It is of interest to note that, in 1948, cancer caused more deaths in persons under twenty than did any or all of the common communicable diseases and, with the exception of tuberculosis, more than all the other listed communicable diseases combined. Details of these deaths are shown in Table IV.

Cancer is widely distributed in the body; practically every organ and tissue may be the seat of its development. Wherever cellular tissue exists, cancer may be found. The effectiveness of cancer control depends upon early recognition and prompt and adequate treatment of the largest possible

number of cancer patients. The location of the primary lesion, whether easily accessible or inaccessible, plays an important part in early diagnosis.

Up to 1925, cancer deaths in females outranked those in males. For the past three years, this ratio has been reversed. The reason for this is not apparent at this time.

In females, the most accessible body sites for examination are the oral cavity, skin, breast, pelvis and rectum. In these areas, practically all of which are readily accessible for early diagnosis, occur more than 60 per cent of the cancers causing death in this sex. Cancer in the female breast, uterus and other pelvic organs causes 42.2 per cent of all such deaths in this sex. In males, the oral cavity, skin, rectum and prostate are readily examined and will yield a goodly percentage of all the fatal cancers in this sex.

Unfortunately, cancer of the digestive system, which causes 36 per cent of such deaths in women and 46 per cent in men, is difficult to diagnose in early stages, because, with the exception of the rectum, special methods must be employed. The same is true of the lungs, which causes 14 per cent of such deaths in men and 3.9 per cent in women. Seventy-eight per cent of cancer deaths among males is found in the digestive, respiratory and genitourinary systems. Table V shows the percentage distribution of cancer deaths by sex in the most common sites.

The cancer statistics cited are based on records taken from death certificates. I wish I could speak with equal authority on the incidence and prevalence of cancer. I cannot. An accurate record of the number of cancer cases is lacking. Cancer lends itself to the same type of registration as was found to be a prerequisite to effective control of tuberculosis. Cancer has been made a reportable disease in Michigan and it is hoped that in time reliable statistics on the incidence and prevalence of the disease will be available. Registration of cancer cases is necessary to obtain this desirable information and to plan and conduct an effective control program. Through registration programs in many other states, valuable information about the extent of the cancer problem is being obtained. In Hillsdale County in this state, registration of cancer patients has been carried out for the past three years with gratifying results to the physicians and the public. Its extension to all counties will mark a real step forward in the fight against cancer in Michigan.

TABLE V. PERCENTAGE DISTRIBUTION OF DEATHS DUE TO CANCER MICHIGAN—1948

Site	Total	Male	Female
Digestive Organs and Peritoneum	41.1	46.0	36.0
Respiratory System	9.3	14.4	3.9
Breast	9.2	0.2	18.6
Uterus	8.2	.....	16.8
Male Genital Organs	6.1	11.9	.....
Urinary Organs (Male and Female)	4.7	6.0	3.2
Female Genital Organs (Other than Uterus)	3.3	.....	6.8
Brain and Other Parts of Central Nervous System	1.9	2.3	1.4
Skin	1.4	1.8	1.1
Leukemias and Hodgkin's Disease	4.4	5.2	3.7
Other and Unspecified Organs	7.5	7.6	7.4

I have presented the nature and extent of the cancer problem in Michigan. Other speakers on this program will present talks on other aspects of this subject so that a thorough understanding of the problems and their solution may be acquired and an effective control of cancer may be obtained.

To summarize our Michigan cancer problem, I would say:

1. Enough is known about cancer today to make possible the saving of thousands of lives.
2. While Michigan has a constructive cancer control program, greater efforts at control must be made to bring down the death rate.
3. Cancer now ranks as the second leading cause of death; 8,336 such deaths were reported in 1948.
4. There probably are more than 25,000 cases of cancer in Michigan at this time.
5. Although cancer deaths occur at all ages, the probability of death due to cancer increases with age.
6. Cancer is an important cause of death in younger age groups.
7. More than 60 per cent of cancers in both sexes are readily accessible for diagnosis. A detection program aimed primarily at these accessible sites gives promise of finding many cancers in early and curable stages.

In conclusion, there is unnecessary suffering and death from cancer which may be relieved or removed through a comprehensive control program. This program must include the activities of all interested organizations, groups and individuals, so that an integrated and united effort may be made to give more effective direction to the control of cancer in Michigan. The job can and must be done.

The Hillsdale Plan in Action

By Arthur W. Strom, M.D.
Hillsdale, Michigan

THE PROGRAM for tumor detection, which has become known as the Hillsdale Plan, was begun by members of the Hillsdale County Medical Society in January, 1948. In the summer of 1947 a survey made under the auspices of the Cancer Control Committee of the Michigan State Medical Society of all cancer cases treated by Hillsdale County physicians in the calendar year of 1946, showed that over 60 per cent of these people had cancers of the skin, breast, uterus and rectum, and that all of these sites could be readily examined by physicians in their own offices without special equipment. Lay groups, such as woman's clubs, the Grange and the local chapter of the American Cancer Society, were interested in the institution of a detection center or some other method whereby individuals could secure cancer detection examinations.

With the guidance of the Cancer Control Committee of the Michigan State Medical Society, it was our decision to make every doctor's office a cancer detection center, since such a procedure would entail no additional cost for extra office space or special assistants, and would not draw too heavily on any one physician's time from his routine practice. Of the eighteen practicing physicians in Hillsdale County, thirteen are doing tumor detection examinations under this plan.

During the winter of 1948, extensive local newspaper publicity was given to this plan, practically all of which was in the nature of news stories about the 1947 survey and the readiness of physicians to receive patients for examination. Much publicity work was carried out by the Hillsdale County Health Department, service clubs, the local chapter of the American Cancer Society and individual physicians. Interest aroused by the initial publicity, together with the satisfactory results of the examinations, has maintained the number of examinations at a high level without subsequent organized publicity efforts.

Originally only women over forty were urged to be examined once each six months, but younger women and also men were given tumor detection examinations if they were requested. Now the examinations are recommended to all ages of both sexes.

The examination procedure is not complicated. The patient makes an office appointment with the physician of his choice, usually his family physician, for the examination which is usually made within a few days, thus elimiating any backlog or long waiting periods. Another group of patients undergoing tumor detection examinations are those visiting their physicians at periodic intervals for chronic diseases such as diabetes, arthritis, and heart disease, on whom detection examinations are made every six months with their co-operation and consent. The patient is weighed, the temperature and pulse rate recorded, and the urine tested. After disrobing and draping, questions are asked regarding symptoms which might indicate cancer and a general physical examination is carried out. This includes examination of the skin, tongue, gums, inner cheeks, throat, neck, breasts, heart, lungs, abdomen, genital organs and rectum. The blood is tested for anemia if indicated.

Should history and examination reveal suspicious or definite evidence of tumor, the patient is so told, and arrangements are made for securing a small piece of suspected tissue for microscopic examination to prove the diagnosis. If x-ray examinations are indicated, arrangements are made for them to be made at the local hospital. All suspicious cases are studied until cancer is or is not proved. Even though the examination reveals no evidence of tumor, re-examination at six-month intervals is advised. This re-examination is very important for those past middle life.

Needless to say, many abnormal conditions other than cancer have been found and advice given for their correction. Time does not permit a cataloging of these conditions, some of which are classed medically as precancerous diseases. Certainly one of the largest groups has been women of middle age with abnormal conditions of the cervix, or the mouth of the womb. It has been reliably stated that cancer rarely develops in a normal healthy cervix; the return to normality of a diseased cervix after treatment has forestalled the development of cancer in many cases, we feel sure.

Simple records are kept of the examinations and reported monthly to the County Health Department which maintains a confidential file for statistical purposes. This file is available only to the cancer committee of the Hillsdale County Medical Society and other properly authorized persons.

Presented at the First Cancer Conference of the Michigan State Medical Society, October 11, 1949, at Lansing, Michigan.

How much does this examination cost? A charge of $4.00 or $5.00, which is the usual fee in this community for a physical examination, is made by the examining physician. There are additional charges when special laboratory or x-ray examinations are necessary. For those persons to whom the examination fee is a hardship, loan funds are available from the local chapter of the American Cancer Society with which this fee can be paid. The cost of record forms was less than $10.00 per doctor co-operating in this plan, and was paid from funds of the Hillsdale County Medical Society. The cost of part time clerical work in keeping the central master file is borne by the County Health Department.

In the first nineteen months the plan has been in operation, through July, 1949, 1,950 examinations have been made, of which 1,547 were original examinations, 324 second examinations and seventy-nine third examinations. Fifty-four cases of cancer were found. This is 2.7 per cent of all examination and 3.49 per cent of the individuals examined. Of the fifty-four cases found, thirty-two (60 per cent) were early or only moderately advanced, offering probability of cure by treatment.

According to the U. S. Census population for 1940, 17.5 per cent of the females over forty in Hillsdale County have had one or more examinations since this program began.

It should be pointed out that these 1,547 people had never before had an examination for cancer. Even those found with advanced cancer had never consulted a physician regarding their condition previous to this examination. No cancer patient already known to his physician or whose cancer was discovered by examination when ill in the hospital or at home has been included in the examinations reported above. There were fifteen additional cancers in this latter category and practically all were far advanced.

The chief difficulty encountered in making this plan more effective is that of securing the patient's co-operation in returning for examination each six months. Every patient originally examined has been advised of the desirability of such re-examinations, and a fair percentage has returned for them. A personal letter from physician to patient is under consideration for those who fail to return at six-month intervals.

Experience gained in carrying out this program indicates the need for a continuing lay educational program to accompany the examination procedure. There is still a tendency on the part of those examined to consider one examination with negative findings as assurance against cancer for an indefinite period. Education is needed to break down this dangerous attitude and to demonstrate that their protection against the development of cancer to a dangerous extent depends on their faithful return for semiannual examinations.

The program has stimulated participating physicians to a much keener interest in cancer diagnosis and treatment. It has also made necessary an expansion of hospital facilities in the departments of radiology and pathology for the further service to these added cancer patients. These expanded hospital facilities have increased the services for maintaining the community health which has profited because of the Hillsdale Plan for Tumor Detection. By this plan we are exerting a more effective effort than ever before in detecting and successfully treating cancer in our community.

While physicians have many other diseases to consider in their daily practice, Hillsdale County physicians will continue to meet the demand for cancer detection examinations to the limit of their time.

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BLOOD BANK INFORMATION ASKED BY AMA

As a first step in determining the capacity, equipment, personnel, inventory, general processing procedures, and arrangements for emergency co-operation among blood banks, a survey of blood banks has been mailed by the Bureau of Medical Economic Research of the American Medical Association.

A questionnaire has been mailed to more than 1,500 blood banks and 5,000 hospitals which have no blood banks. Certain facts about blood utilization by hospitals are needed to complete the portion of the study being covered at the present time.

In order to simplify the printing and statistical analysis, one questionnaire form is being used for two purposes in preference to two separate questionnaires. To differentiate between the two, the blood bank questionnaire is printed in black and the one for hospitals without blood banks is printed in blue. The identification is shown on the top of the first page of the questionnaire. Blood bank and hospital administrators are urged to return the replies promptly, filling the forms in as accurately as possible, even if questionnaire printed in the wrong color is received. This can be noted below your signature.

Cancer of the Breast

By U. V. Portmann, M.D.
Cleveland, Ohio

IT WOULD SEEM that since the breast is superficial and accessible to examination, cancer in it would be discovered early, treated promptly and have a high curability rate. But this is not true. Too frequently women do not discover cancers in the breast before they are well advanced because it is difficult to detect small tumors even by careful palpation, especially in obese individuals. Also, when aware of changes in the breast, some women delay having a physician examine them because they have no pain, they fear cancer, or for economic or other reasons. It has been found that delay in treatment may be attributed to the patient in about 65 per cent of instances. This figure can be reduced by lay education, allaying fear and periodic examinations.

It is regrettable that delay in 25 per cent of instances also has been attributable to bad medical advice given patients who discovered lumps in the breast or other signs of cancer and went to physicians who did not examine them carefully, who advised them to disregard the indications, gave local medication and instructed them to return if anything more serious should develop. In one investigation it was found that the delay in treatment after unwise medical advice was thirteen months and that the delay of six months had cut the cure rate in half. The reasons for unsound advice may be that some physicians are not suspicious of innocent appearing breast tumors or expect the typical textbook descriptions of cancer which are signs of advanced and incurable disease.

Every physician should carefully examine the breasts of women patients whether or not they complain of symptoms referrable to these organs. If this is done, many cancers may be discovered and treatment begun immediately. There are many diseases of the mammary gland in addition to cancer which have more or less characteristic signs and symptoms which must be recognized. [Some of the conditions for differential diagnosis include anomalies: abnormal anatomic and physiologic alterations associated with endocrine disturbances which are usually manifest in infants or adolescents but also appear in adults in association with dysfunctions of the ovaries, adrenals or hypophysis; normal alterations in size and shape during the puerperium and lactation; galactocele due to obstruction of lacteal ducts during lactation; acute mastitis and abscesses due to infection; chronic mastitis of tuberculosis, syphilis or mycoses; subacute mastodynia; plasma cell mastitis; adenosis; chronic cystic mastitis; benign tumors including solitary cysts, intraductile and intracystic papillomas, fibroadenomas and several uncommon types.]

The treatment of cancer of the breast requires co-operation of the physician, surgeon, radiologist and pathologist. Those who examine patients with manifestations indicative of disease of the breast should be capable not only of making a differential diagnosis and suspecting the possibility of cancer when tumors are present but also of deciding the most appropriate method of treatment. Surgeons and physicians should recognize the limitations of operations for cancer and radiologists be aware of the indications for operation. The pathologist must not only make microscopic examinations for diagnosis but should also determine the extent of involvement by means of his studies of all tissues, including every lymph node removed.

Surgical procedures have been used for centuries in treatment of cancer of the breast, but it was only a little more than fifty years ago that few, if any, patients were cured. At that time Halstead and Willy Meyer described the technique and results of radical mastectomy. Since then results have improved materially. Also, at about the same time roentgen rays and radium were discovered which were found later to have carcinocidal effects and therefore to be useful in treatment of cancer of the breast. However, there has been disagreement and uncertainty regarding the indications, benefits and results of irradiation. This is due principally to reports in which comparisons of surgical and radiological procedures have been made without classifying cases according to anatomic extent of involvement. There can be little doubt that patients are usually referred to radiologists only when in advanced stages of disease with recurrences or metastases, or when they are surgically incurable. The results of irradiation for such cases cannot be compared with those of less extensive involvement which have only been operated upon.

Several methods of classifying cancers of the breast based on their clinical manifestations have

Presented at the Eighty-fourth Annual Session of the Michigan State Medical Society at Grand Rapids, September 23, 1949.
From the Cleveland Clinic and the Frank E. Bunts Educational Institute.

been suggested. One of these consists of dividing cases into the "operable" and "inoperable". However there are differences of opinion regarding these terms and their definitions. All cancers of the breast can be attacked surgically but whether or not a patient should be operated upon may depend upon the surgeon's estimate of his own skill rather than his ability to benefit the patient. Also, there are cancers of the breast of extensive involvement but without clinical manifestations which will prove to be incurable after pathologic examination. For example, there may be metastases in many axillary lymph nodes. Therefore classifications based upon clinical criteria alone are not satisfactory in deciding the indications and limitations of different methods of treatment on the basis of statistical results.

Pathologists have classified cancers of the breast into several histologic types and attempted to grade them for prognosis according to degrees of differentiation or undifferentiation of the tissues. However many cancers of the breast are a mixture of different types of histology and degrees of differentiation. Also, a cancer of presumably high malignancy may be limited and therefore curable, whereas a low grade highly differentiated cancer may be incurable because of the degree of extension. Therefore classifications based on pathologic criteria alone are not satisfactory in deciding methods of treatment or comparing the results.

Undoubtedly the most satisfactory method of classifying cases of cancer of the breast is to weigh all clinical and pathological evidences of the extent of involvement. By the use of such classification it will be possible to decide upon the indications and limitations of different therapeutic procedures and make equitable comparisons of results obtained. The accompanying classification based on both clinical and pathological manifestations of extent of involvement was developed in 1937 for an analysis of our series of over 800 cases.

Indications and limitations of surgical and radiological methods of treating tumors of the breast may be discussed on the basis of the anatomical extent of involvement as outlined in the suggested classification.

In many instances it will be impossible to differentiate clinically between benign and malignant neoplasms of the breast, although the rate of growth and age of the patient may indicate the probable character of the tumor. Under such circumstances biopsy and microscopic examination of the tissues is necessary.

Group or Stage I

Skin—not involved.
Tumor—localized in breast and movable.
Metastases—none in axillary nodes or elsewhere.

Group or Stage II

Skin—not involved.
Tumor—localized in breast and movable.
Metastases—few axillary nodes involved, no metastases elsewhere.

Group or Stage III

Skin—edematous, brawny red induration or inflammation not obviously due to infection, extensive ulceration, multiple secondary nodules.
Tumor—diffusely infiltrating breast, fixation of tumor or breast to chest wall, edema of breast, secondary tumors.
Metastases—many axillary nodes involved or fixed. No clinical or roentgenologic evidences of remote metastases.

Group or Stage IV

Skin—as in any other group or stage.
Tumor—as in any other group or stage.
Metastases—axillary and supraclavicular nodes extensively involved. Clinical or roentgenologic evidences of remote metastases.

Biopsy of small, localized, movable tumors of the breast by aspiration needle or similar methods is not always reliable and may lead to erroneous conclusions. Occasionally benign and malignant tumors may be present concomitantly and near each other. A carcinoma may be cystic or a cyst contain carcinoma. Therefore aspiration may reveal only benign tissue or cystic fluid even when cancer is present nearby. When this occurs an erroneous diagnosis may be made, which results in improper treatment. Aspiration biopsies are satisfactory however, for confirming diagnosis in cases with frank clinical manifestations of cancer.

When there is doubt about the character of a small breast tumor, the safest procedure for biopsy is immediate excision and microscopic examination. If the tumor is benign, no other treatment is necessary; if malignant, the surgeon must decide how to proceed. In most cases radical mastectomy will be performed in order to investigate and remove the axillary contents, because even small cancers may metastasize to axillary nodes without presenting clinical evidence.

If, after microscopic examination of each lymph node, no evidence of metastases is found, the case

may be classified as Group or Stage I. Approximately 25 per cent of all cases operated upon will be in this category, and the general average of five-year survivals will be about 85 per cent by operation alone. However, about 15 per cent in which no involvement of axillary lymph nodes is detected, even microscopically, die of cancer within five years. The reason is that not all cancer was removed even in these early cases or the growth had metastasized to other tissues than the axillary nodes. This may occur from inner quadrant neoplasms which extend to the internal mammary, parasternal and anterior mediastinal nodes.

It is illogical to give preoperative roentgen therapy to a localized tumor in the breast before the correct diagnosis has been established; this may best be done by complete excision. Also routine postoperative treatment is unnecessary for Stage I cases because the curability rate by operation alone is high. Furthermore, there is no way to tell in cases which will not be cured surgically where the residual cancer tissue or metastases are located nor what regions to treat. However, some surgeons advise postoperative roentgen therapy even for Stage I cases. They fear undetectable metastases in lymph nodes and possible criticism by patients who might subsequently develop metastases. In our experience postoperative roentgen therapy of Stage I cases has not increased survival rates.

Clinically undetectable metastases to axillary lymph nodes may be found after operation in patients with small, localized, movable cancers. However, radical mastectomy was justifiable because of the uncertainty about the true character of the tumor or extent of involvement prior to operation. When only a few nodes are found to be involved, perhaps 25 per cent of all, such cases may be classified in Group or Stage II because the prognosis is less favorable than if no nodes are involved. About 25 per cent of cases operated upon will be in this category, and the general average of five-year survivals will be less than 50 per cent by operation alone.

Neither is preoperative roentgen therapy indicated for Group II cases, because the diagnosis cannot be established until after operation. However postoperative roentgen therapy should be given, especially to the axilla and supraclavicular regions, because it may delay the growth of undetected cancer in these areas.

Although local recurrences in the chest wall or axilla seldom occur in Stage I or II cases, it is obvious that extension must have taken place beyond the anatomic limits of operation because at least 50 per cent of the latter group die of cancer within five years. The most common route of metastases is to the axilla, then to the supraclavicular and infraclavicular nodes. Therefore, since there is adequate proof that roentgen rays destroy some cancer cells and delay growth of malignant tissue, it would seem logical to administer treatment postoperatively to the regions where metastases may have taken place. Although this procedure may not cure, because cancers of the breast are inherently radio-resistant, it will increase the five-year survival rate of approximately 10 to 15 per cent of Stage II cases.

There is disagreement even among radiologists about the value of postoperative roentgen therapy, but there are few statistical reports based on classified cases from which satisfactory conclusions may be drawn. However, we constantly urge early treatment of cancer. Therefore, when residual cancer is known to exist, as it does in at least 50 per cent of Group II patients operated upon, it would seem advisable, logical and necessary to attack it immediately by the only method available, radiation therapy, even though the percentage of survivals is not increased remarkably.

Amazingly, some surgeons have contended that recurrence or metastases appeared sooner than would be expected in patients given postoperative irradiation. These conditions develop in spite of the treatment and indicate that cancer tissue remained after the operation, which was unsuccessful as far as cure is concerned. Recurrences and metastases may develop a few weeks or years after operation, and no one can forsee when this will occur. Actually there is abundant experimental and clinical proof that irradiation may inhibit development of cancer cells or destroy them and that irradiated tissues resist their growth. Unfortunately irradiation does not always cure.

Some patients appear to have localized tumors of the breast, normal skin and no clinical evidence of metastases, but it is evident after operation that many axillary lymph nodes are involved. Although operations were justifiable, the prognosis is no more optimistic than for patients with clinical evidence of more advanced disease. The five-year survival rate is in direct proportion to the number of lymph nodes involved; therefore, patients with metastases in many nodes may be classified in Group or Stage

III. The general average of five-year survivals after operation alone for such cases is not more than 15 per cent. This can be increased by postoperative roentgen therapy in about 10 per cent.

Malignant tumors of the breast begin as localized masses of neoplastic cells, which as they grow, progressively increase the size of the masses and invade surrounding tissues. Eventually the invasion will manifest itself clinically in a number of ways in the skin, the degree of involvement of the breast and underlying tissues and as metastases to regional lymph nodes. These clinical signs of extent of involvement, some of which have been listed in the classification for Group or Stage III, are indications of advanced incurable disease which will be discussed later. About 30 per cent of all cases in our series were in this category when first examined. The general average of five-year survivals following operation alone is approximately 5 per cent and can be increased by roentgen therapy to 10 or 15 per cent.

Another Group or Stage IV must be made to include patients who have remote metastases on initial examination, whether or not there are local manifestations of advanced disease. The metastases may be found in the lungs or bones by routine roentgenologic examinations which should be made of every patient prior to treatment. Also, included in this category are patients with palpable enlarged supraclavicular nodes, involvement of the opposite breast or contralateral lymph nodes or clinical evidence of involvement of other viscera such as the liver or brain. Approximately 20 per cent of all cases in our series had evidence of remote metastases on initial examination. These cases are incurable though about 5 per cent may survive five years without treatment.

Groups III and IV have constituted almost 50 per cent of the cases of primary cancer of the breast we have seen, and the survival rate following operation alone has been no higher than the average life expectancy of patients who have had no treatment. This observation also led me, in 1937, to evolve what I call the "Criteria of Incurability" which are listed in simple form:

The Skin

1. Edema (orange or pigskin) of more than slight extent.
2. Ulceration of more than slight extent.
3. Brawny red and inflammed not obviously due to infection.

The Breast

1. Diffusely edematous.
2. Diffusely infiltrated.
3. Secondary tumors.
4. Fixation of tumor or breast to chest wall.

Metastases

1. Axillary lymph nodes numerous, extensively involved and fixed.
2. Supraclavicular lymph nodes or edema of the arm.
3. Involvement of contralateral breast or lymph nodes.
4. Remote metastases in bones, lungs or other viscera.

The presence of the signs listed in these "criteria" should be looked for by physicians and surgeons when examining every woman with a tumor of the breast. There is abundant proof that life may actually be shortened by dissemination when cancer is incised. Anyone referring patients for surgery or attempting to operate (especially upon women with any of these criteria) should consider the following quotation from an eminent surgeon and a collaborating pathologist: "The widespread disrepute in which cancer surgery is held by laity is due in large measure to a willingness on the part of some surgeons to accept hopelessly advanced cases for radical operations—the indications for palliative operations are seldom met with—and in the absence of such, any operation, the purpose of which is merely to remove as much malignant tissue as possible, or in cases where complete removal is clearly out of the question, should be strongly condemned. Operations of this type contribute nothing to the comfort of the patient nor prolongation of life; on the contrary, the end frequently is hastened by exciting the disease to more active growth".

The foregoing discussion and quotation brings up the question of how patients with such signs of incurability should be treated. The only available methods of proven efficiency are roentgen ray and radium therapy and endocrine therapy for palliation. Therefore, patients in this classification should be referred to radiologists for treatment. Adequate irradiation of patients with incurable breast cancer will result in approximately 15 per cent five-year survivals; more survive each year than among those operated upon or not treated. Although irradiation may not cure it will be palliative, and prolong the lives and economic usefulness of many patients.

In some of the patients adequately irradiated, the cancers and lymph node metastases become

smaller, no longer palpable and the breast fibrosed. Indications such as these encourage an inclination to operate. In our experience operations following irradiation for incurable cancer invariably have revealed neoplastic tissue still present in lymph nodes and a well fibrosed breast. It is my impression that these patients did not survive so long as they might have if no operation had been performed. Therefore it may be concluded that irradiation does not make patients with "criteria of incurability" surgically curable.

The technique of radiologic procedures need not be discussed. It may be of interest to mention sex hormone therapy.

Sterilization by roentgen irradiation may be considered a form of hormone therapy. Sterilization by roentgen therapy should be performed for all patients who still menstruate and show some criteria of incurability, for those who have local recurrences or remote metastases. The progress of disease seems to be delayed frequently enough to warrant sterilization as a routine procedure. The question of sterilizing women with metastases only in lymph nodes depends upon the extent of involvement and the age of the patient. Sterilization is not advisable for young women when metastases are found only in a few axillary nodes or until more remote metastases appear. Although pregnancy may hasten the development of cancer of the breast, many women with minimal axillary involvement have given birth to children without ill effects. However, women approaching the menopause are grateful for cessation of the menses.

After sterilization some women complain of vasomotor disturbances or "hot flashes". It is not advisable to administer hormone therapy for relief because false menstruation manifested by slight irregular vaginal bleeding may be induced and the cancer stimulated. Sedative medications are preferable.

Many women with local recurrences, metastases from cancer of the breast or other incurable indications are benefited from administration of sex hormones. Although it has been proved experimentally and clinically that estrogens may induce cancer of the breast and stimulate the rate of growth, it seems paradoxical that large doses also cause an opposite effect, resulting in retardation of the disease, especially in soft tissues of older women. Stilbestrol may be given orally in doses of from 10 to 30 mg. per day. This administration has resulted in improvement and regression of primary cancers, local recurrences and lymph node and pulmonary metastases and a sense of well being in a number of cases. However, the results are inconsistent and best in women sixty years of age or older. In young women there is danger of accelerating the disease.

Androgens seem to be more effective for young women and for patients with osseous metastases. Primary tumors and lymph node metastases also may be influenced beneficially and diminish in size. We have used testosterone propionate intravenously 100 mg. three times a week, but half this dose may be effectual. In some cases spectacular relief of pain from osseous metastases has resulted in a few days, but in other patients benefit has not been observed for two or three weeks. In the meantime, often there is improvement in appetite, gain in weight, a sense of well being and strength increase. However the results are variable. In not a few cases the roentgenologic appearance of osseous metastases changes with apparent new bone formation. In others, symptomatic relief may be obtained without change in the appearance of metastatic lesions. Unfortunately in some patients the entire disease process seems to be accelerated.

Conclusions

1. Cases of cancer of the breast may be and should be classified according to clinical and pathological manifestations of anatomic extent of involvement in order to determine the indications and limitations of different therapeutic procedures and their results. A classification is suggested.

2. Patients not classified under the "criteria of incurability" should be operated upon. When axillary nodes are involved, postoperative roentgen therapy should be given.

3. Patients with more than one indication listed in the "criteria" should be treated by radiologic procedures alone.

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for a maximum of sixty days in any benefit year but only thirty days for tuberculosis or mental diseases. Other benefits included would be payment for chemical, bacteriological, diagnostic x-ray and related laboratory services; x-ray, radium, and related therapy; physiotherapy; services of optometrists; and prescribed drugs which are unusually expensive, special appliances, and eyeglasses; as the Board by regulation designates as auxiliary services, practical, and essential to good health care.

—A.M.A. Washington Bureau Analysis.

Diagnosis and Treatment of Anorectal Diseases

By Harry E. Bacon, M.D., F.A.C.S., F.R.S.M., and Timothy F. Moran, M.D.

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THE SHARP progressive decline in the morbidity and mortality rates of anorectal diseases can be attributed almost solely to the relentless work of those interested in this portion of the intestinal tract, particularly in regard to early diagnosis and treatment. Through this method of attack the general public will realize the prominent position that the field of proctology holds among the higher specialties and as a result will present themselves for examination at the earliest possible time following the onset of an anorectal disorder. The progressive uprooting of the fear of rectal surgery has been a strong factor in the production of good results.

Pruritus Ani

This syndrome embodies an alteration in the skin due to an irritation in the peripheral nerve ending, caused by some local or constitutional disease. Whatever the initiating cause may be, eventually as a result of the prolonged irritation, trauma from scratching, or chemical dermatitis from medication, there develops a thickening of the perianal skin, lichenification of the dermis and hypertrophy of the marginal folds with cracks and ulceration. The importance of the dietary regimen should not be underestimated. Not only are certain foods irritating in themselves, but the manner in which even bland foods are prepared and seasoned may render them unsuitable. Such foods as oatmeal, fish, oysters, clams, crabs, lobsters, cheese, pickles and cucumbers are interdicted. Excessive eating and the use of condiments and alcoholic beverages should be avoided. Outdoor exercise several times daily should be advised for the individual with sedentary occupation. In some cases considerable improvement has followed the local use of pyribenzamine (2 per cent in cream) and capsules of benadryl or dilantin sodium by mouth. In the first stage of simple erythema, cornstarch enemas, dusting powder (either talc or cornstarch) and the insertation of a piece of cotton between the folds may be valuable. Where moisture and maceration are present, the following may be applied:

℞
Phenolis mxxx
Glycerin ʒi
Menthol
Camphor pulv. agar i
Resorcini ʒiss
Acidi Borici ʒiii
Bismuth subnit ʒii
Liq. calcis qs. ʒvi
Sig: Apply q. 3 hours.

Where the skin is dry, brittle and leathery, massage following the application of cod-liver-oil ointment may give good results. One of the following is of value: Ung. Picis, 2 per cent; Ung. ichthyoli, 5 per cent, or Ung. Hydrargyri, 5 per cent. The hypothesis of Besredka, as applied to the pruritic syndrome, entails the taking of cultures from the anal and the perianal regions. From these cultures an autogenous vaccine is prepared which is injected into the pruritic area. The injection of absolute alcohol has been valuable in many instances. In our experience, surgery is instituted only after any co-existing pathologic condition has been corrected and at least one or even two forms of the injection treatment have been given a fair trial. The operative means of combating pruritus ani is confined to (1) severance of the sensory nerve filament supplying that skin, (2) the removal of the diseased skin, and (3) division of the peripheral nerves following their identification by means of a faradic current. Undoubtedly, the most popular procedure is the Ball operation or one of its modifications.

Hemorrhoids

This condition, according to estimates, comprises about 30 per cent of all anorectal disorders. Nearly everyone during his life span has symptoms caused by hemorrhoids, and at some time many will require measures for relief.

Hemorrhoids represent varicose dilatations involving one or more radicles of the hemorrhoidal veins. Pathologically, the condition is one of degeneration in which thrombosis, rupture, inflammation, ulceration and necrosis may occur. Good results are to be obtained by the injection treatment, provided the cases are selected carefully. This form of therapy is indicated only in uncomplicated internal hemorrhoids. The high percentage of recurrence materially limits its field of use-

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fulness. Experience has taught that a hemorrhoidectomy properly performed is the procedure of choice. Unfortunately, the surgical removal of hemorrhoids is occasionally followed by hemorrhage, immediate and remote; severe pain, anal stenosis, residual infection, abscess formation, fissure and recurrence of the hemorrhoids. The occurrence of such sequelae is due largely to the operative technique, the lack of knowledge of the anatomy of this portion of the anorectum, the pathologic process itself, unecessary trauma, failure to preserve adequate anal and perianal skin, inclusion of the sphincter muscle in the clamp or suture, and inadequate aftercare. We believe very strongly that the care of the patient with hemorrhoids is not completed at the time of his discharge from the hospital.

Abscess

Localized collections of pus in the region of the anorectum demand surgical treatment. Their importance should not be underestimated, since neglect and delayed or improper intervention result frequently in extensive tissue destruction, multiple fistulas, permanent incontinence and general debility. Formerly it was our practice to incise and drain unilateral and bilateral abscesses of the ischiorectal type and correct the fistula later. In an effort to avoid multiple operations and protracted periods of hospitalization and convalescence, an attempt is now being made to locate the primary or internal opening at the first examination. In this type of abscess the anorectal line is carefully examined, visibly, digitally and by means of a hook for a crypt or a breech in the continuity of the skin or the mucous membrane.

At the maximum point of fluctuation and beyond the outermost border of the external sphincter muscle a stab wound is made into which a flexible metal probe is introduced gently toward the primary opening. The skin incision is carried to such a point that the excision of the fistulous tract is at right angles to the fibers of the external sphincter muscle. The skin over the abscess cavity is excised widely to permit adequate drainage. A single strip of petrolatum gauze may be placed in the fistulous wound for a period of twenty-four hours. The best procedure for the novice is to incise and drain the abscess and then remove the fistula later. We have performed this maneuver in selected cases in several hundred instances and seldom have encountered a recurrence. Operative wounds are rarely packed and never for more than forty-eight hours. Hot sitz baths are employed three times daily.

Fistula

An anorectal fistula may be defined as a pathologic tract or abnormal communication between the anorectum and some adjacent tissue viscus or skin surface. Invariably, all fistulas are preceded by abscess formation, which in turn usually originates from an infection entering through a crypt of Morgagni situated at the anorectal line. The history of a previous abscess near the anus, followed by a discharge of purulent material, is highly suggestive of fistula in ano. Examination of the perianal region usually reveals a small depression in the skin itself, in the center of an excrescence or in a scar from a former incision. Horseshoe fistulas have an opening on either side of the anal orifice, and the subcutaneous fibrous cordlike tract may be traced easily from one opening extending around the anus to another opening on the opposite side. The diagnostic use of dyes in our experience is very limited. A disadvantage of this procedure is that the dye follows the line of least resistance and often penetrates the wall of the tract, escaping into the tissue and thus masking its true extent.

Excision of the fistula tract en bloc is the only procedure to be recommended and entails the removal of the tract itself, together with both the internal and external openings. The resultant wound is never packed. In all instances meticulous after-care is of utmost importance to ensure proper healing.

Prolapse

This condition is seldom recognized, except in those cases which present extensive prolapse or procidentia. Structural, mechanical or inflammatory factors which tend to diminish the normal fascial, muscular, or peritoneal supports of the rectum and thereby increase the motility are conducive to prolapse and/or procidentia. To one accustomed to the use of the proctosigmoidoscope with the patient in the inverted or knee-shoulder position, varying degrees of mucosal prolapse are easily discernible. Only too frequently these patients offer a history of chronic constipation, an indeterminate type of pressure, a fullness or weight in the pelvis, and incompleteness on evacuation of the bowel. Careful examination discloses complete absence of the normal mucosal pattern and partial

or complete obliteration of the valves of Houston. Marked redundancy and reduplication of the rectal mucosa will be noted by digital examination and through the sigmoidoscope. Not infrequently the condition is associated with a redundant sigmoid, as evidenced by roentgenographic study following an opaque enema.

In children, prolapse is usually amenable to injections of quinine and urea hydrochloride or phenol in oil given in ¼ c.c. dosage circumferentially at graduated levels. In adults, a modification of the procedure advocated by Murietta in 1938 is ideal.

For procidentia, the surgical approach should be abdominal, embodying fixation, obliteration and occasionally plication.

Chronic Ulcerative Colitis

This disease-entity, described by some as thrombo-ulcerative proctosigmoiditis, is an inflammatory condition involving the mucosal surface, spreading into the muscular and serosal coats. In approximately 95 per cent of the cases the process originates in the rectum and sigmoid. From our observations, it spreads by direct extension along the wall of the bowel and not by the lymphatics or the blood stream. It is characterized pathologically by typical changes in the intestinal wall and clinically by its progressive course, the passage of frequent bloody, mucopurulent discharges, tenesmus, abdominal pain and general lassitude.

The value of proctosigmoidoscopy in routine examination can be understood readily. Early in the disease the mucosa exhibits a rather diffuse hyperemia. As the process continues, edema and pitting are apparent. Minute yellowish abscesses may be seen beneath the mucosal layer, which upon rupture form ulcers that give a motheaten appearance to the lining of the membrane that has already become granular. In some cases an ironed-out or rounded appearance of the valve edges is discernible. At a later stage, the confluence of these petechial ulcerations form large ragged areas. Fever of the septic type is not uncommon, especially during the acute stage or in an exacerbation of the chronic stage. Ordinarily the blood count discloses a secondary anemia and a mild leukocytosis. In all these cases it is highly expedient to study the case thoroughly in order to rule out a specific influence. Smears are made by scraping the rectum mucosa, and from the pathogenic organisms thus isolated, a vaccine is prepared. An opaque enema is administered to determine the upper extent of the disease process. In febrile cases bed rest is imperative. An attempt is made to correct factors influencing the physical and mental status of the patient. In fulminating cases parenteral feeding is employed; otherwise, a diet that is of low residue, bland, high in calories, vitamins and proteins, yet low in starch and sugar, is prescribed. We have found that frequent small blood transfusions have been very efficacious. Retention enemas of cod-liver oil may be used judiciously. For diarrhea, kaomagma or kaopectate by rectum and by mouth is usually satisfactory. A mixture of bismuth subcarbonate 3ii in warm olive oil 3iv by rectum every four hours may be beneficial.

Vitamin therapy has played an important role in the amelioration of this condition. Vitamin A, 100,000 units intramuscularly, vitamin B complex, containing thiamine hydrochloride 20 mg., nicotinamide 150 mg., riboflavin 4 mg., pantothenic acid 5 mg., pyrodoxine 10 mg., is given twice daily. Sodium ascorbate, 500 mg. daily, is administered intravenously. We have observed beneficial results with neoprontosil (5 grains every six hours for ten days). Sulfonamide therapy in ulcerative colitis has shown variable results. There seems to be little that indicates any effect upon the primary cause of the disease, but probably there is considerable value in the bacteriostatic effect of the sulfonamides on the bacteria in the human as well as on those which secondarily invade the mucosa. In patients who are running a septic course, the use of a soluble sulfonamide, such as sulfadiazine, is indicated in an effort to reach the invading organisms through adequate concentration of the drug in the blood.

In general, the few reports on the use of penicillin in ulcerative colitis have not been encouraging. Streptomycin in our hands has shown little if any improvement, although in a small group of patients aureomycin given orally and chloromycetin have been beneficial. In our experience viodenum is of no avail, except in possibly the very mild afebrile cases. It probably will be found that the antibiotics, like the sulfonamides, have no curative effect upon the colitis, but that in some cases there will be a favorable clinical effect, apparently due to the action upon secondary infection. When sepsis proves to be intractable to medical measures, ileostomy is indicated. In our experience total colectomy should be performed where exacerbations and remissions have occurred. Of twenty-

three patients in whom colectomy was instituted, there were no deaths, and 94.1 per cent were rehabilitated.

Pilonidal Cysts

The diagnosis of pilonidal disease is usually not difficult. Pain and discomfort of varying degree, swellings and mucopurulent discharge with incision and drainage on numerous occasions are usually cited by the patient. Examination discloses one or more openings in the midline or adjacent skin overlying the sacrococcygeal region. An inflammatory process, presenting increased heat, swelling, tenderness, induration, redness and fluctuation, with pus discharging from the opening and perhaps a tuft of hair extending therefrom, leaves little doubt as to the diagnosis.

The treatment is distinctly surgical and consists of the removal of the cyst and all tributary tracts. The relative merit of closing or permitting the resultant wound to heal and fill in by granulation is and always will be a moot question. A survey of over a thousand cases has aided in establishing definite criteria for both the open and the closed methods. Pilonidal cysts and sinuses presenting acute abscess formation and/or multiple tracts and openings and/or definite involvement of the sacrum or the coccyx should be excised in their entirety and left open to granulate in from the bottom. Recurrent cases fall into this category. Conversely, pilonidal cysts and sinuses of small or moderate size, presenting congenital midline openings and devoid of an acute inflammatory process with abscess formation, may be sutured. In the latter, as in all cases, all existing pathologic lesions must be removed, hemostasis must be complete, and all dead spaces must be obliterated. For closure, interrupted sutures of No. 32 alloy steel wire, placed in tier formation, are introduced, but the skin is permitted to remain open. From 1938 to 1948, 230 private cases have been treated by the above criteria. The average period of hospitalization was three and three-fourths days; the average period from the date of operation until complete healing was five and one-half weeks.

Lymphogranuloma Venereum

Probably the most fascinating disease-entity drawn to our attention during the past decade and a half is lymphogranuloma venereum. To us it is of special interest because of the fact that inflammatory stricture of the rectum and esthiomene of the anoperineal and the anovulvar regions are most frequently due to a filterable virus. Stricture of the rectum is an organic narrowing of the lumen of the bowel by fibrous tissue involving the mucous membrane, the submucosa and the muscular coat. It is characterized by progressive constipation, tenesmus and mucopurulent discharge. Rectal manifestations are most common in the female because of the distribution of the lymphatic network. The condition is more frequent between the ages of seventeen and forty, or the period of greatest sexual activity. Also, there is a marked preference for Negroes. It should be borne in mind that the inflammatory process may attack any layer of the rectum or the tissues outside its wall. If from within, the irritation results in erosion of the mucous membrane upon which infection is superimposed. With continuation of the etiologic irritant its inflammatory process becomes subacute and finally chronic in nature, so that the various layers of the rectum and the tissues outside its wall are gradually involved by continuity and contiguity of structure. As a result of this chronic inflammation, much young fibroblastic tissue is deposited in the submucosa as well as in other coats, which gradually leads to thickening of its wall. By subsequent contraction of the maturing fibroblastic tissue, this thickening becomes markedly increased so that there eventually results a firm inelastic narrowing to which the term stricture is applied. A history of constant soiling by feces, blood and pus is suggestive of an inflammatory stricture, especially when cited by a Negress between the ages of twenty and forty. Although the diagnosis by inspection is not absolute, it offers to the careful observer an excellent idea of the pathologic condition present. Not infrequently the region of the anus is moist and glued together by the thick mucopurulent discharge. Hypertrophic skin tags, condylomata of various sizes and one or more fistulous openings are not uncommon. Since approximately all inflammatory strictures of the rectum are within reach of the finger, the diagnosis should not be difficult. Through a narrowed-lumen proctoscope the stricture is identified by its pale leathery and thickened appearance.

In 1925, Frei, of Berlin, introduced a cutaneous test for this disease which has been a distinct diagnostic value in inguinal adenopathies and anorectal syndromes. More recently we have employed the chick embryo antigen (Lygranum) and have found it more specific. Use is made of yolk sacs harnessed

from chick embryos moribund or recently dead from infection with the agent of lymphogranuloma venereum and containing the agent in high concentration free from contamination by other microorganisms or viruses. The technique for testing patients diagnostically is the same for both antigen and antigen control. After preparing the skin of the forearm with alcohol, 0.1 c.c. of each material is inoculated intradermally, and the reaction is read in forty-eight and seventy-two hours. A papule 6 by 6 mm. or greater indicates a positive reaction.

Attempt should be made to build up the constitution of the patient, since there are usually varying degrees of intoxication, weakness and loss of weight. The diet should be nutritious and composed of foods which leave but little residue. Local instillations of icthyol (10 c.c. of a 25 per cent aqueous solution twice daily) are soothing to the mucous membrane. Chemotherapy and antibiotic therapy have diminished the secondary infection but have shown no effect on the organized fibrosis. It has been our experience that resection (proctosigmoidectomy) or excision by the abdominoperineal route is the procedure to be chosen for permanency of cure.

Benign Growths

Adenoma and papilloma of the rectum are common. In our series there were forty-four cases in the young, of which twenty-nine were boys and fifteen were girls. The ages ranged from fourteen months to eleven years. All lesions were located in the rectum or the sigmoid colon. Thirty-six were visualized through the sigmoidoscope and eight by roentgenographic studies, employing opaque enemas followed by inflation with air. In the adult these are usually observed during routine examination, but occasionally patients present themselves because of bleeding. With polypoid growths of large size, pressure or obstructive symptoms are not uncommon. When repeated biopsies show no evidence of malignancy, destruction by fulguration may be instituted; especially is this true in children. Local excision may be employed in selected cases. Polypoid lesions in the sigmoid require transcolonic excision, which has been instituted in sixty-one of our patients.

Malignancy

Cancer of the rectum and the sigmoid represent approximately 80 per cent of all intestinal malignancies. In the male it is second only to that of the stomach. It is difficult to state accurately whether or not cancer is on the increase; certainly today this disease process is being observed with greater frequency. Several reasons may serve to explain this: first, improvements in diagnostic technique and the more widespread use of these methods; and, secondly, patients are transitioned over gaps of intermediate illnesses and therefore reach an age when cancer is more common.

There are no pathognomonic symptoms of rectal or sigmoidal malignancy, but certain complaints are highly suggestive. The passage of blood, bright or dark red in color, occurring at, following or independent of the defecatory act, must be looked upon as a symptom of bowel malignancy until proved to be otherwise by various diagnostic means. Change in bowel habit, progressive constipation, alternate constipation and diarrhea, early morning diarrhea, incompleteness of evacuation, urgency and especially frequent desire for stool are suggestive of this dreaded malady.

Too frequently we prescribe for symptoms without attempting to determine the cause. Rectal and colon symptoms should be as seriously and conscientiously evaluated as those from any other part of the human organism, particularly since the intestinal tract is devoid of sensory innervation.

One must be ever mindful that approximately 78 per cent of cancers involving the anus, the rectum and the sigmoid are within reach of the examining finger. Therefore, following a careful history, digital examination is of utmost importance. By proctosigmoidoscopy, with proper cleansing of the bowel the entire rectum, lower and midsigmoid may be visualized. The presence of a fixed, nodular, cauliflower-like growth, involving the mucosal wall, or a deep excavating ulcer with everted edges will serve to make the diagnosis. A biopsy should be taken for confirmation, but particularly to determine the grade of the tumor. When no lesion is demonstrated by careful digital and sigmoidoscopic examination, a roentgenologic study of the bowel, employing an opaque enema, is invaluable.

If cancer is to be cured, the diagnosis must be made early and radical extirpation must be performed. It is definitely erroneous to assume that a malignant tumor of small size should be eradicated by a conservative operation or that one of large size should be removed by very radical surgery.

The radical one-stage operation (abdominoperi-

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Fine Nylon Tubes for Feeding in Esophageal Carcinoma

By Harry Kirschbaum, M.D., F.A.C.S.
Detroit, Michigan

IN ESOPHAGEAL CARCINOMA in which the process is so advanced that resection is impossible, metastasis obvious, and gastrostomy of questionable value, the use of a fine nylon tube for continuous feeding suggested itself.

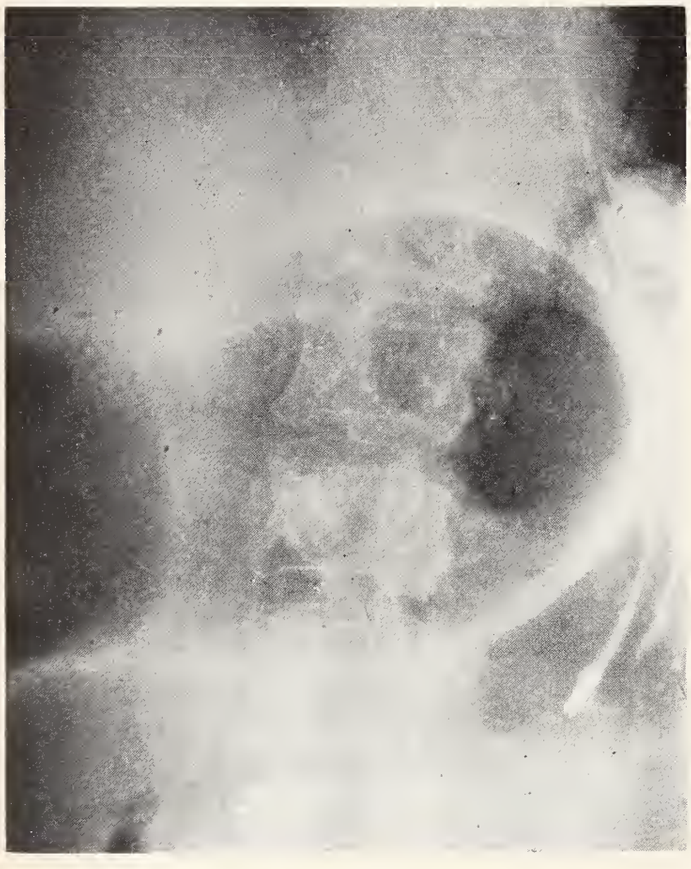

Fig. 1. X-ray with tube in place.

Many patients will be able to swallow semisolids and liquids almost within two or three weeks before death. It is during this last period that the use of a fine nylon tube was found valuable for continuous feeding rather than subject the patient to a gastrostomy. Since the tube is not irritating, it could be used also to make the patient more comfortable than with continuous use of the Levine tube or Miller Abbott tube.

Use of a fine nylon tube can be of value in:

1. Continuous drip gastric feeding in ulcer or medication in ulcer.
2. Esophageal obstructions and spasm.
3. With fine holes on the sides a fine spray of thrombin could be applied in esophageal varies.
4. In gastric analysis studies, prolonged.
5. In children and infants.

The nylon tube may be marked by five metal markers of different types and to add to its flexibility may have small rubber joints at various lengths along the tubes.

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DIAGNOSIS AND TREATMENT OF ANORECTAL DISEASES

(Continued from Page 313)

neal resection) advocated by Miles in 1908 is still considered by some the procedure par excellence. It permits wide removal of the gland-bearing area, offers a low recurrence rate and a low mortality. One disadvantage is presented, namely, the establishment of an abdominal colostomy. For this reason alone, innumerable patients jeopardize their lives by refusing what radical operation might offer. The ingenious procedure popularized by Babcock in 1931 permits the same degree of wide excision of the malignant rectum and gland-bearing areas with the formation of a perianal anus in its normal location. By such a procedure an abdominal colostomy is avoided. Approached through the abdomen and the perineum (abdominoperineal proctosigmoidectomy), the cancerous bowel is dissected free, and the vascularized sigmoid is drawn down to the site of the normal anus. With improvements and refinements in technique, preservation of the sphincter has produced excellent results; in fact, in our more recent cases the function may be described as normal. The vast majority of our patients are out of bed on the third day; they are discharged on the tenth; and they return to work in from six to ten weeks. In a series of 470 cases, the mortality rate is well under 5 per cent, and the recurrence rate 17.9 per cent, in spite of a resectability of 87.7 per cent. As to salvage, 52.6 per cent are living and well after five years, whereas if those patients with liver metastases found at the time of resection are excluded, the incidence is 58.4 per cent.

Bilateral Intraocular Metastasis to the Choroid of a Primary Adenocarcinoma of the Cervix

Case Report

By Bernard C. Wildgen, M.D.
Muskegon, Michigan

METASTATIC CARCINOMA of the choroid is relatively rare. Cases having bilateral involvement are considered to comprise 20.8 per cent of the reported series.[2] Approximately 250 cases have been brought to the literature, of which about 160 were histologically proven.[1,3]

In the present case the ocular symptoms were manifest for over two years prior to the discovery of the primary tumor site. This delay occurred despite repeated, diligent and careful studies. The several factors which account for this delay in diagnosis are seen clearly in the review of the course of events, and shall be mentioned subsequently.

Report of Case

F.M.C., a Negro female, thirty-seven years of age, was admitted to Harper Hospital on July 20, 1946, complaining of loss of vision of the left eye for a period of four months; and this was soon followed by frequent left frontal headache. Lid edema became gradually evident during the month prior to admission.

A review of the past history and systems revealed nothing unusual.

It is of note that the patient had been married for thirteen years, had had no pregnancies, and there had been no change in the regularity of the interval and duration of menses.

The family history revealed that her mother had died at the age of forty-five years with "cancer of the womb."

Ocular Examination.—The lids were moderately swollen. The bulbar and palpebral conjunctiva showed chemosis and marked vascular congestion. Corneal edema was extreme. Vision consisted of light perception only. Pupillary reactions were sluggish and a mass could be seen within the fundus. This fundus mass appeared well forward in a position, making visualization with direct light more satisfactory than by use of the opthalmoscope. The surface was undulating and somewhat nodular. Intraocular tension was markedly elevated. The globe was painful on palpation. The right eye showed nothing unusual. The vision was 20/20.

From the Department of Ophthalmology, Harper Hospital, Detroit, Michigan.

With the exception of obesity, the general physical examination was otherwise not exceptional. Laboratory findings were not abnormal. The blood Kahn test was negative.

The clinical impression was that of intraocular tumor, probably melanosarcoma, with severe secondary glaucoma.

Enucleation, followed by pathological examination, presented the unusual finding of a rapidly growing medullary carcinoma, the cytology of which suggested a primary gastrointestinal site. Almost exclusive choroidal involvment was noted, without retinal, optic nerve or scleral invasion.

Pathological Report.—Gross examination of the tissue section revealed a specimen measuring 22 by 23 mm., having a long nerve section. A mass within the globe 12 mm. in diameter was present. Microscopic study showed a subepithelial pannus. Complete anterior synechia and an atrophic iris with extensive pigment migration into the stroma were present. The vessels of the ciliary body were dilated and the ciliary processes presented loss of epithelium in some areas.

The spaces of Fontana were occluded. The lens had no abnormality of significance. Total separation of the retina was present, the retina being covered by a fibrinous exudate and surrounded by extensive hemorrhage. In the choroid extensive invasion and destruction by a tumor (Figs. 1 and 2) was evident. The tumor cytology was dense and the stromal elements were scanty. Several areas of necrosis were present within the tumor mass. Study of numerous sections of the sclera and optic nerve revealed no evidence of invasion of these structures.

On September 25, 1946, the patient returned for postoperative observation and complained of blurred vision of the remaining eye. The vision was 20/60, correctable to 20/30. The intraocular tension was normal. No significant fundus findings were present. Visual field study revealed a scotoma in the superior nasal quadrant. The patient was instructed to return in a few days for further examination, but this she did not do until February 7, 1947, at which time the ocular situation had markedly changed.

On this occasion vision of 20/400 was present and no improvement was obtained with refraction. The eye was externally quiet. The pupil dilated well with 10 per cent neosynepherine. Funduscopic examination revealed a large, greyish yellow, rounded retinal elevation. This was located in the superior temporal area but extended inferiorly through and below the macular area. The highest elevation was approximately 3 D. The macular reflex was absent and the elevation extended 1 to 1½ disc diameters from the macula superiorly and inferiorly. The margins were indistinct. Atrophic pigmentary changes were present over most of the surface. The intraocular tension was normal.

She was immediately admitted for urgent x-ray therapy as an attempt to preserve vision as long as possible. She received ten deep x-ray treatments to the right eye and orbit. Following this the lesion decreased markedly in size and the vision improved.

On May 1, 1947, she was again admitted to the hospital with the history of sudden pain and complete blindness occurring seven days prior to admission. Examina-

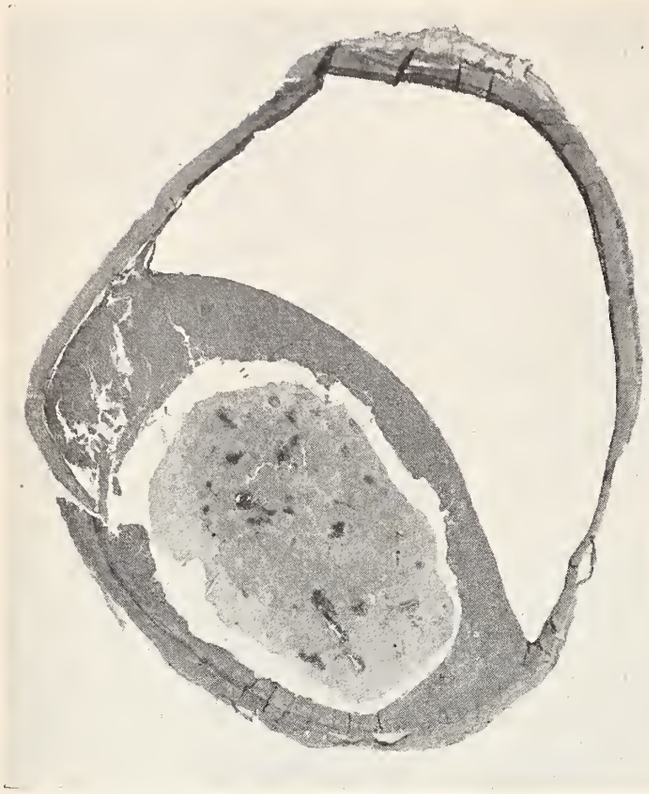

Fig. 1. Left eye. Section showing tumor of choroid.

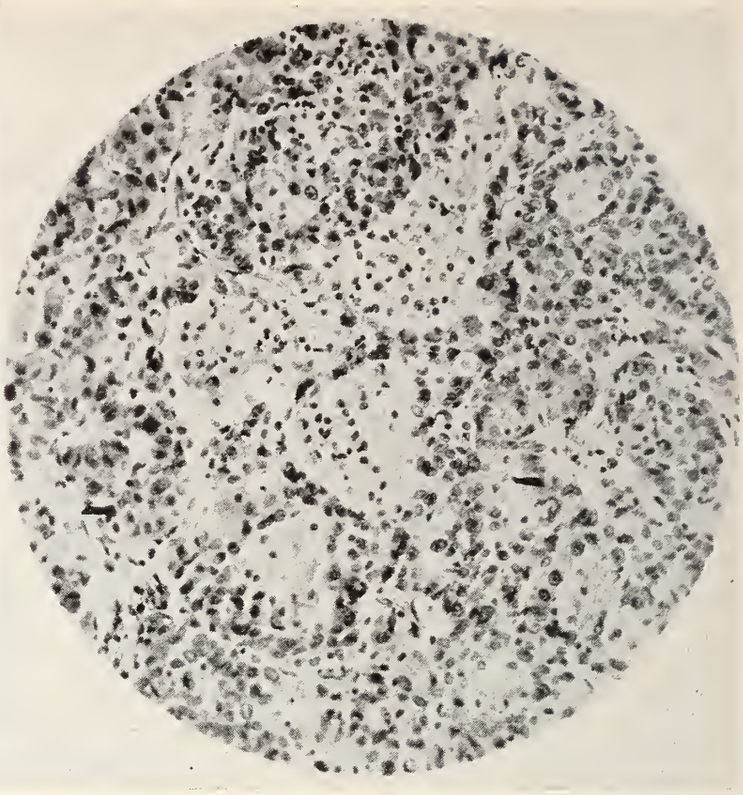

Fig. 2. Left eye. Magnification showing tumor cells of Figure 1.

Fig. 3. Right eye. Tumor of choroid illustrated by arrow.

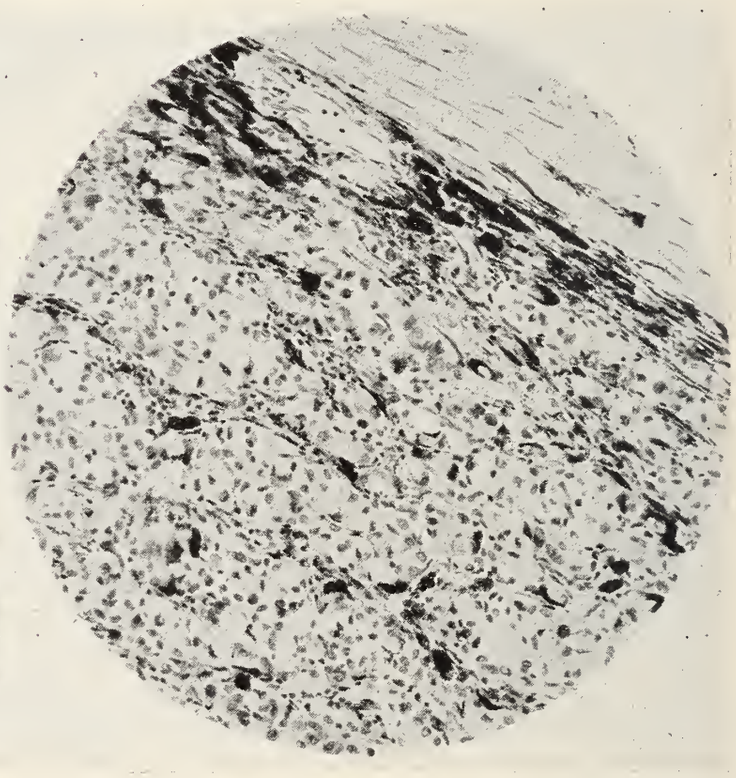

Fig. 4. Right eye. Magnification showing tumor cells of Figure 3.

tion revealed no vision, severe lid and conjunctival edema, corneal edema and a fundus mass of reddish hue. This mass was best seen by direct illumination through the pupil. The globe was quite firm and intensely painful to palpation.

An unsuccessful attempt was made to control the severe secondary glaucoma. On May 3, 1947, the eye was enucleated with the preoperative diagnosis of metastatic intraocular tumor, intraocular hemorrhage and intractable secondary glaucoma.

The postoperative course was uneventful, with primary healing of the operative site.

The gross tissue specimen was 23 mm. in length with an eosin-colored mass in the position of the vitreous. Microscopic inspection showed the corneal epithelium to be thin but showing edema in some areas. Extensive an-

terior synechia blocked the anterior chamber angle, and the iris showed advanced atrophic changes. The lens had evidence of posterior synechia. The ciliary body and processes were atropic and had areas of hemorrhage.

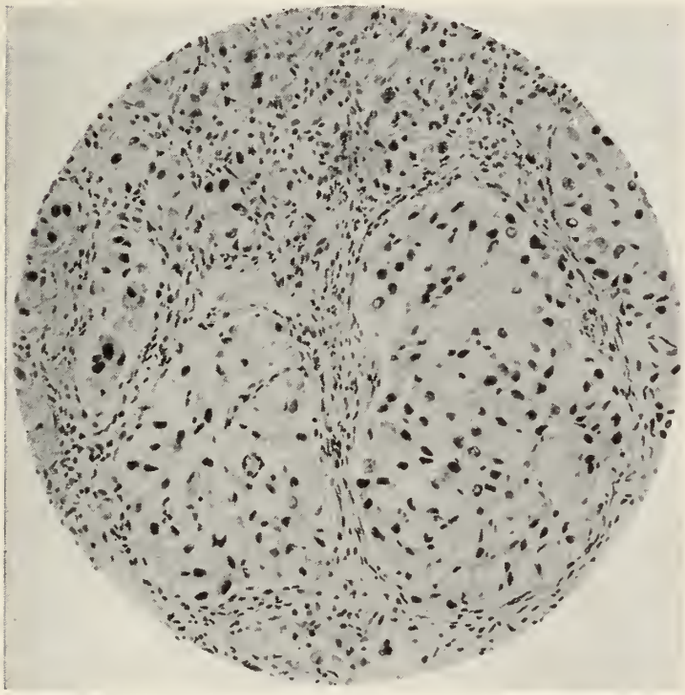

Fig. 5. Magnification showing tumor cells of cervical biopsy.

Within the vitreous space there was a large hemorrhage. Proximal to the nerve head, in the choroidal area, a mass 6 mm. in length and 2½ mm. in thickness was present (Figs. 3 and 4). The tumor consisted of densely packed groups of cells, which were large and round. The nuclei stained deeply. A moderate amount of stroma was present, and this contained scattered pigment-bearing cells. Inspection of the sclera and optic nerve gave no evidence of invasion of these structures.

Repeated surveys were done throughout the course of observation of this patient to determine the primary source of the tumor. During October, 1947, the patient was to have been admitted to the hospital for biopsy of an indurated mass which surrounded the urethral canal. As in previous instances the patient unfortunately chose to avoid this event.

On May 13, 1948, she was admitted to another hospital of this city with the clinical history of a recent 30-pound weight loss. Dysuria, consisting of nocturia and difficulty initiating the urinary stream, had been present several months. Menstrual periods had been regular in interval, duration and volume. Pelvic examination revealed the cervix to be red, hypertrophied and the anterior lip eroded. The fundus of the uterus was then palpable and was enlarged to the size of a three months' pregnancy. The surface was irregular and firm. The right adnexa was negative, but in the left adnexa a sense of resistance and some tenderness was present.

Roentgenological study revealed congestive changes of the lungs, a non-specific duodenitis and osteoblastosis of the dorsal spine segments. The latter was considered confirmatory evidence of metastasis. It is of note that previous examinations done eight months before were negative in this regard.

On May 20, 1948, biopsy of the cervix was done and specimen study revealed adenocarcinoma, Grade IV. This biopsy was later repeated at another hospital. (June 17, 1948), and the independent diagnosis of adenocarcinoma of the cervix was made (Fig. 5). The condition of the patient became rapidly worse until she expired August 27, 1948. Unfortunately autopsy permission was not granted.

Summary

A case of bilateral metastasis to the choroid from a primary adenocarcinoma of the cervix has been presented. The infrequency of such cases has been mentioned. Factors which tended to make the search for the primary tumor difficult consisted of the obesity of the patient, which hampered satisfactory palpation of the uterus size; the consistently negative gynecological history, and the patient's erratic appearance for observation.

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MSMS

CANADA AND THE UNITED STATES BLITZ COMMON FOE: MOSQUITOES

A combined airborne operation against an airborne foe has just been carried out jointly by defense agencies of Canada and the United States as scientists of the two countries leveled their deadliest insecticides against the arctic mosquito.

Airplanes operating in the Hudson Bay area sprayed wide swaths of enemy breeding territory, killing off the pestiferous little insects by the millions. The joint operation, organized to test the effectiveness of various insecticides in making the north country habitable for troops in the field, proved that DDT and parathion do an effective job in killing off the larvae.

Although DDT was used principally, parathion proved highly effective at even lighter dosages. Parathion, the U. S. Bureau of Entomology and Plant Quarantine explains, is so deadly a poison that it has not been recommended for general use by the public.—*Science News Letter,* December 24, 1949

Exfoliative Cytology in Periodical Physical Examination

By Nelson Taylor, M.D., and
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DOCTOR George Papanicolaou, professor of clinical anatomy at Cornell University Medical College, first reported the detection of cancer cells in vaginal smears in 1928[14] and later used a method of vaginal smears in determining estrogenic response. However, in 1942[15] he again reported a procedure for recognition of malignant cells and then in 1943 collaborated with Traut[16] on the atlas, "Diagnosis of Uterine Cancer by Vaginal Smear." Subsequent articles[17,18] have amplified this initial work. Historically it must be recorded, however, that in 1864 Sanders[20] reported the diagnosis of tumor of the bladder on the basis of urinary sediment examination.

The cytologic test for cancer has received widest application in the study of vaginal smears by various observers with varying degrees of reported accuracy and satisfaction with the method. Wiles and Hellwig[24] feel that clinical pathologists should afford the procedure a trial, formulate its advantages and limitations and establish its place in the diagnosis of cancer. In their hands there was 80 per cent correlation. They emphasized that it was not possible to differentiate between changes due to irradiation, carcinoma *in situ* and invasive carcinoma. Thus tissue diagnosis should not be replaced by smears. They also point out that the trichrome stain of Papanicolaou is not specific for malignant cells but the advantage is in the light staining of the cytoplasm.

Lombard, Middleton, Warren and Gates[10] of the Massachusetts Department of Health supervised the examination of 6,265 subjects and concluded that by exfoliative cytology it may be possible to find one uterine cancer among 200 to 500 women free from symptoms. They further state "the technique is more likely to lower cancer mortality because it has made a larger number of physicians aware of the insignificance of the signs and symptoms that may be associated with early carcinoma of the uterus than because of the number of early cases it discloses."

Scheffey, Rokoff and Hoffman[21] reported the examination of 500 consecutive cases in which uniform techniques by the same observers (pathologist and cytologist) were employed. There was correct correlation between smear and tissue biopsy in 94.8 per cent. However, their greatest error was in the false negatives.

Chung[3] reports on vaginal smears from a total of 566 patients seen in a gynecological department, 542 without previous diagnosis. In this group there were twenty-three reported positive with seven false positives and one known false negative.

Fremont-Smith, Graham and Meigs[5,6] review 3,710 cases studied in five years at Vincent Memorial Hospital supplementing an earlier report.[13] In 3,327 patients without cancer a mistaken positive diagnosis was made in 55, 1.6 per cent. Their total diagnostic error was 2.8 per cent. This same group comments that many patients may have carcinoma of the cervix for as long as eight years with neither symptoms nor signs. They conclude that the smear is frequently more accurate than biopsy. Jones, Neustaeder and MacKenzie[9] are similarly enthusiastic in their acceptance of exfoliative cytology.

Hauptmann[7] reports that ninety carcinomas were studied cytologically, and correlation was found in eighty-six. The four false negatives were all smears obtained from ulcerating malignant breast lesions (similar to one false negative in our series). False positives were found in five of 178 controls presumed not to have cancer.

Shushan[22] accumulated the experience of several groups totaling 5,329 cases. False positives averaged 0.7 per cent, false negatives 0.8 per cent with an over-all range from 0.3 per cent to 4 per cent.

For supplemental information in periodic examinations the vaginal smear is of value in estimating estrogenic activity. MacKenzie[12] and colleagues reported that in seventy-six patients the vaginal smear agreed with the clinical diagnosis 82 per cent of the time with both natural and surgical menopause. Regardless of the etiology of the menopause, 35 per cent of the smears showed atrophy within eighteen months and 60 per cent showed atrophy after this time. The authors found, using Papanicolaou's criteria, an 84 per cent agreement between the known phase of the menstrual cycle and a single vaginal smear. The vaginal smear correlated with the endometrial biopsy 89 per cent of the time. The vaginal smear was found of value in determining the prognosis in secondary amenorrhea since there was very little success in the treatment of patients with definite atrophic changes.

In correlating vaginal smears and tissue diagnosis Ayre suggests the use of a cervical cone knife in order to obtain precision biopsy of the squamo-columnar junction when positive vaginal smears have been reported.[4]

Male urethral smears have not been investigated from the standpoint of malignancy, but such investigations as those of Vogel, McGavach and Kammendel [23] have indicated certain advantages. They studied males of all ages, but in the group from eighteen to thirty-two years there was a somewhat higher degree of cornification and acidophilism than in those younger and older. Maximum values for 17-ketosteroids have also been reported in this age group by Barnet and colleagues.[2]

Albers, McDonald and Thompson[1] in a well-documented report state, "Cancer of the prostate accounts for 8000 deaths each year in the United States. Well-advanced carcinoma can be found by the examining finger, but the procedure of rectal examination of the prostate is totally inadequate for early malignancy arising in the anterior or lateral lobes." They concluded that carcinoma cells can be found in the prostatic fluid and identified with a high degree of accuracy. The chief difficulty is in recognizing malignant cells that are well differentiated (Grade I).

Increasingly more emphasis has been placed on the importance of early carcinomas which have not broken out of the parent epithelium to invade surrounding tissue and therefore are known as carcinoma *in situ*. This designation currently is applied to such well-recognized lesions in the breast, cervix and stomach. It is also believed to apply to Bowen's precancerous dermatosis of the skin and to exactly similar lesions in the esophagus and anus.

Foot and Papanicolaou[4] report the discovery of blood in ureteral catheterized urine in which repeated specimens indicated the presence of malignancy. Nephrectomy verified the diagnosis of carcinoma *in situ* involving many collecting tubules on microscopic but not macroscopic examination.

Woolner and McDonald[25] reported on the cytological examination of the sputum from 2,188 patients and analyzed 200 cases in which a diagnosis of carcinoma was made. In 190 cases a final diagnosis of bronchogenic carcinoma or pulmonary metastatic carcinoma was established. In four cases a carcinoma in the esophagus, larynx or trachea was demonstrated. In four other cases the diagnosis was proved to be falsely positive. In the remaining two cases the final diagnosis was uncertain. Exfoliated carcinoma cells in sputum or bronchial secretions provided the only preoperative microscopic evidence of cancer in twenty-nine of seventy-four cases of bronchogenic carcinoma in which surgical exploration was carried out. In thirteen cases in which the lesion proved removable a preoperative diagnosis of cancer was based on the cytological characteristics of sputum or bronchial secretion. They conclude that "cytologic examination of sputum is of great diagnostic value in the case of patients suspected of having bronchogenic carcinoma and in whom bronchoscopic examination is contraindicated."

McCandless and Faloon[11] present a case of bronchogenic carcinoma with metastasis diagnosed by cytological examination of the pericardial fluid. The diagnosis was confirmed by sputum examination. They note that antemortem diagnoses have been similarly made in ten other cases on the basis of pericardial fluid.

Pollard and his co-workers studied the cytology in 326 gastric aspirations on 278 patients. There were 86 per cent negative reports and 14 per cent indefinite or falsely positive. In forty-one cases of proved gastric neoplasm 65 per cent were indefinite or negative. Despite this rather wide disagreement they state that the method has sufficient merit to warrant further trial. However, false positive reports occur sufficiently often to render it inadvisable to plan therapy on the basis of gastric cytologic study alone. Conversely, they felt that a report of malignant cells in the fasting gastric contents is an indication for exhaustive study to rule out gastric carcinoma.

Technique

Vaginal Smears.—A slightly curved, blunt end glass pipet, 6 inches long and 0.5 cm. in diameter, has a 3-inch rubber suction bulb attached. (Frequently narrower gauge pipets are of assistance when there is a scarcity of vaginal excretion). The glass pipet may be introduced directly into the posterior fornix of the vagina without a speculum in large screening series. There appears, however, to be some advantage to the use of a speculum with minimal or no lubricant. The pipet is then introduced into the cervix without undue pressure meanwhile pressing and releasing the rubber bulb. The material thus collected is blown onto a glass slide and spread thinly and evenly over two-thirds of the slide. The process is repeated using only vaginal excretion for the second slide. The slides are

immediately placed, smeared end down, into a wide mouthed bottle containing equal parts of 95 per cent alcohol and ether. Fixation requires at least five minutes, but slides may be left in the solution for periods of two weeks. The patient then takes the bottle to the laboratory where the slides are stained with Papanicolaou's trichrome stain and interpreted by a pathologist.

Gastric Specimen.—Gastric specimens are obtained directly through the gastric lavage tube from the fasting stomach and placed on slides and fixed as above. The method used by Pollard[19] consisted in placing fasting gastric aspiration material in 95 per cent alcohol and then centrifugation. The sediment was then smeared and fixed.

Urine Specimens.—Samples of urine sediment may be spread evenly on the slide as in spreading a blood smear with the end of another slide.

Prostatic Fluid.—Prostatic fluid may be spread upon a slide unless the material is too thin. In this case it should be centrifuged or mixed with a small quantity of egg albumin.

Accessible Ulcerating Lesions.—Accessible ulcerating lesions may be rubbed cautiously with the gloved finger which is then streaked on the slide. Some investigators[8] take a small section of tissue, tease it with two needles on a slide where is placed a drop of human serum and then transfer a portion of this to two cover slips and spread as with a blood smear.

Sputum.—Sputum may be spread directly onto the slide with caution to avoid a thick smear.

Material

The vaginal and prostatic exfoliative cytologic slides reported in our series were all obtained from private patients in the course of complete physical examinations. Some were annual examinations and others done for complaints referrable to other systems than the genital tract. The study was begun in June, 1948, and terminated in February, 1949. Routine prostatic smears were taken only during the last three months of the study. The series includes 182 smears on 169 patients.

Results

Vaginal smears accounted for the majority of the examinations. In a group of 115 cases with 124 smears there were five positive for malignancy and three questionable reports. In a supplemental group of eighteen reports to other physicians from the same laboratory there were fourteen negative and four questionable. Two of these latter were repeated and found to be negative.

TABLE I

	Neg.	?	Pos.	Total Pts.	Total Smear
Sputum	1			1	1
Mouth		1	1	1	2
Gastric	2			2	2
Breast	1			1	1
Urine	2		1	3	3
Ascites			1	1	1
Prostate	26	1		27	28
Vaginal	121	7	5	133	144
Total	153	8	8	169	182

TABLE II. POSITIVE VAGINAL SMEARS

1 hysterectomy elsewhere: no malignancy reported (serial sections not run)
2 curettages elsewhere: no malignancy reported (1 received "routine" radium)
1 (80-year-old) advised by roentgenologist (elsewhere) no therapy
1 hysterectomy at Bon Secours=epidermoid carcinoma confirmed

In the group of five reported positive for malignancy, one patient had a hysterectomy at another hospital where the diagnosis was not confirmed. Serial sections of the excised tissue were not run. Two patients had curettages elsewhere without confirmation; one received "routine" radium implantation despite this fact. One eighty-year-old patient was advised by a radiologist elsewhere not to have any therapy. One sixty-one-year-old patient with a smear positive for epidermoid carcinoma was operated at Bon Secours Hospital. There were no gross lesions visible but at curettage a small irregularity was noted in the fundus. However, when hysterectomy* was done this papilloma was found to be benign, but serial sections of the cervix disclosed carcinoma *in situ*.

TABLE III. OTHER POSITIVE SMEARS

1 urine: prostatectomy confirmed adenocarcinoma
1 mouth: biopsy confirmed epidermoid carcinoma
1 ascites: operation confirmed ovarian cystadenocarcinoma

In this series there was only one sputum examination which was negative. One patient had an ulcerating epidermoid carcinoma of the sublingual area proved by biopsy, and smear of this was positive. Two patients had cytologic examinations of gastric contents both reportedly negative. One of these two patients, a fifty-two-year-old man, died of generalized neoplasm, but unfortunately autopsy was not permitted to determine whether the stom-

*Dr. Ira G. Downer.

ach was involved. One patient had a very large ulcerating medullary carcinoma of the breast, and a smear from this was reported negative.

TABLE IV. FALSE NEGATIVES

1 breast:	advanced ulcerating medullary carcinoma
	Possible False Negative
1 gastric:	patient died, generalized neoplasm, autopsy refused

Three patients had cytologic studies of urinary sediment with two negatives. The third was a sixty-five-year-old man with prostatic obstruction presumed to be benign because of the large size and regular conformation of the gland. The Papanicolaou test was reported positive for malignancy, and this was confirmed at operation where adenocarcinoma was found.

Prostatic smears were obtained from twenty-seven men, one of which was reported questionably malignant in a twenty-eight-year-old patient. Repeat smears were negative.

One patient of another physician† had a negative vaginal smear but the ascitic fluid was reported positive for malignant cells. At operation she was found to have a cystadenocarcinoma of the ovary.

Discussion

The chief hazard in this test appears to be the possibility of false positive reports. From the data available these appear to be considerably more frequent than false negatives with the possible exception of advanced neoplasm where the diagnosis is obvious. For some unexplained reason it is often difficult to obtain characteristic cells from such lesions. However, it is imperative that every possible means of obtaining confirmation of exfoliative cytologic studies be employed, using all other means available before definitive therapy is instituted.

An incidental problem is exemplified in the behavior of four of the five patients with positive vaginal smears reported in this series. None had symptoms referrable to the pelvis at time of examination. Therefore, all were understandably disturbed when advised as tactfully as possible of the implications of the test. Nevertheless, the four patients went elsewhere for further observation.

The limitations of the test must be explained to the patient (see explanatory form). Yet the simplicity of the test, its inexpensiveness without hospitalization, lack of discomfort to the patient, ease with which observation may be repeated and its increasing accuracy in the hands of trained observers recommend it for routine use in periodic physical examinations.

†Dr. Carl Swanson.

EXPLANATORY NOTE TO ALL PATIENTS

The exfoliative cytology (Papanicolaou) examination is a *screening* test for cancer of *one particular* part. While the accuracy of interpretation is constantly increasing, it is still not 100 per cent. Occasionally there are technical reasons for repeating the test.

In some quarters it has been deplored that patients derive a false sense of security from a negative Papanicolaou report. However, the propaganda for cancer detection has recently become so intense that we have literally scared the "unmentionables" off our patients. Now if we are able to permit the great majority of them to replace their apparel with equanimity and assurance after negative reports then a double purpose may be served.

It will undoubtedly take many years to fully evaluate this procedure, but this small study raises at least two additional questions: (1) Do visible lesions increase the percentage of false negatives? (2) What will eventuate in those patients with consistently positive exfoliative cytologic smears who refuse definitive therapy?

Conclusions

1. In 169 patients 182 exfoliative cytologic smears were examined.
2. There were four confirmed positives in eight consistently positive smears.
3. The other four patients went elsewhere for further observation.
4. The limitations of the test should be explained to each patient.
5. The simplicity of exfoliative cytology and its increasing accuracy recommend it as a routine screening procedure in periodic physical examinations.
6. Final evaluation of the method must await years of continued observation.

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(Continued on Page 340)

Dysgerminoma of the Ovary

Report of a Case

By W. C. Huyser, M.D.

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THIS TUMOR has a counterpart in the testis where it was first described. The early writers were of the opinion that the testicular tumor had its origin from cells of the seminiferous tubules. Chevassu, in 1906, was the first to apply the term "seminoma" to testicular tumors arising from such cells and to point out that similar cells were found in only one other type of tumor, viz., ovarian tumors. Chenot, in 1911, was the first to establish the existence of seminoma of the ovary. The tumor is rare, and it is estimated that it comprises about 3 per cent of all primary malignant ovarian neoplasms.

The histogenesis of dysgerminoma is still unsettled but the view generally accepted is that of Meyer, who attributed its origin from cells of the early germinal epithelium which failed to acquire sex potential and were therefore incapable of sex direction. The cells were "disgerminal"; hence the name "disgerminoma," suggested by Meyer. He explained that the tubular formations in the testicular homologue represented secondary invasion of the seminal tubules by the neoplasm. Other terms applied to this tumor were carcinoma puellarum, embryonal carcinoma, teratoid carcinoma and alveolar sarcoma.

Since the tumor originates from undifferentiated sex cells, it is void of specific hormonal influence and will therefore neither masculinize nor feminize the individual. Thus, while it is found in hermaphrodites and is a common tumor of pseudohermaphrodites or those with poorly developed sex glands, it has no role in the hermaphroditism which is usually of the congenital or chromosomal type (Novak and Gray). More than one-half of the cases occur in women otherwise normal, and some have borne children before or after the operation for the removal of the tumors.

The growth is one of childhood and early adulthood, differing in this respect from its homologue, the testicular seminoma, which rarely occurs before the age of thirty. Most of the cases (thirteen out of seventeen in the series of Novak and Gray) occurred in the second and third decades. Age limits from reported cases are four and fifty-seven.

The right ovary is more often involved (48 per cent) than the left (26 per cent) (Seegar). In about 25 per cent of the cases there is bilateral involvement. The uninvolved ovary may be normal, aplastic, rudimentary, or absent. The size of the tumor varies from a few centimeters in diameter to one that almost fills the abdominal cavity. Growth is usually rapid and it may attain great size in a period from three to six months. Grossly it is covered by a thick dense capsule and the contour is usually lobulated. Its consistency is described as "rubbery." The cut surface is uniform, grayish in color, with areas of yellowish hue indicating lipoid degeneration. Areas of hemorrhage and necrosis are common.

The microscopic appearance is one of large round tumor cells with hyperchromatic, centrally placed nuclei containing large nucleoli and granular cytoplasm. There are frequent mitotic figures. The cells have an alveolar arrangement separated by connective tissue characteristically infiltrated by lymphocytes. Occasionally giant cells are present. The histologic diagnosis is that of Grade 4 (Broders' classification) embryonal carcinoma with lymphoid stroma (Moreton-Desjardins).

The most common sites of spread are to the uterus, other pelvic organs, peritoneum and omentum. Metastasis to other organs is not common. Involvement of the lumbo-aortic and left supraclavicular lymph glands has been reported. Metastasis by way of the blood stream is rare. Distant metastasis may be absent even when the tumor has attained a large size.

The dysgerminoma has no influence on sex characteristics and neither male nor female sex hormones have ever been demonstrated in the tumor itself or in the body fluids of the patient. Cases are reported in which anterior pituitary-like substances have been increased to the point where the Friedman and Ascheim-Zondek tests on the urine were positive. In four such cases recently reported the tests became negative after treatment of the tumors. In most of the cases the Friedman test is negative.

The clinical picture of dysgerminoma is not sufficiently characteristic to be diagnostic, although a rapidly growing, firm, sensitive, lobulated abdominal tumor in a girl in young adulthood, with a negative Friedman and an x-ray showing soft tissue tumor, is suggestive. Surgical exploration is justi-

Read at regular meeting of Kalamazoo Academy of Medicine, November 15, 1949.

fied as microcopical examination is necessary for diagnosis.

Novak and Gray have divided the cases from a clinical standpoint into three groups: (1) those in which the tumor capsule is intact, with no extension beyond the ovary; (2) those in which there is infiltration, at times massive, of other pelvic viscera, such as the uterine ligaments, tubes, bladder, or the pelvic peritoneum; (3) those in which extensive metastasis is seen, usually to the omentum, parietal peritoneum, lymph glands, liver or other organs.

In the first group unilateral operations are recommended where one ovary is involved. This would conserve the reproductive function if the other ovary were normal. It has been noted that involvement of the remaining ovary occurs in about one-third of the cases. Frequent follow-up examinations are required. Metastasis may become evident which could not be detected at the time of the operation.

In all other cases radical operation is advised. While the tumor is histologically malignant, the clinical course varies greatly in individual cases. Cases are on record where the patient has lived in comparative comfort for several years where only an incomplete operation had been possible. The over-all mortality rate has been suggested by Seegar at between 36 to 60 per cent, with slightly higher rate of recurrence and metastasis.

Treatment by x-ray has been quite generally used although the opinions of authors differ on the radiosensitivity of the tumor. Moreton and Desjardins of the Mayo Clinic consider the tumor radiosensitive second only to lymphoblastoma. Because of the probability of wide and often early metastasis, radiation is given over the entire abdomen and the left supraclavicular region in all cases, using a current of low potential to avoid excessive damage to normal structures. The treatments are repeated in a month; subsequent courses depend upon follow-up examinations.

Case Report

T.P.,* a girl, white, aged sixteen, complained of a painful enlargement of the abdomen. She first noticed a "bunch" about two months before, and enlargement has been rapid since, especially the last two weeks. Her abdomen felt sensitive, but for three days prior to the operation (ten days hence) she had several attacks of severe sharp pain which radiated to her right shoulder and caused her to feel faint. Her first menstrual period occurred two months before and lasted five days. She flowed again twenty-eight days later, this time six days. Periods were normal so far as her mother could judge.

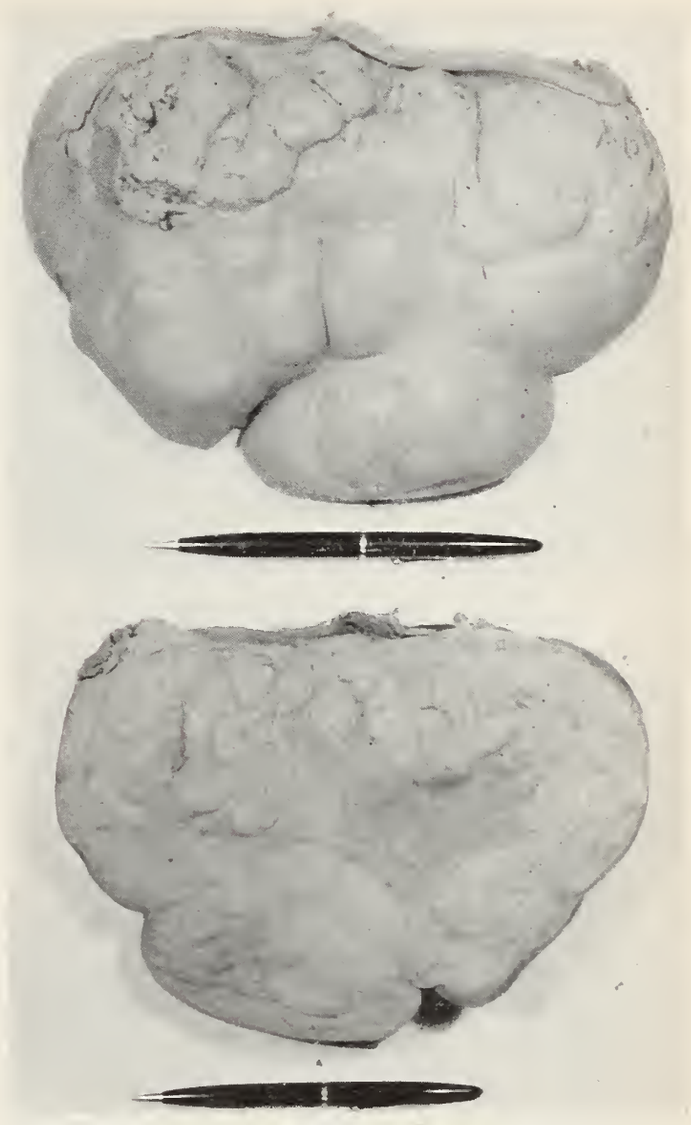

Fig. 1. Photograph of dysgerminoma of the ovary with cross section showing lobulation and extensive necrosis. Size 24 by 17 by 11 cm.

Past History.—Except for childhood diseases the patient had never been ill.

Family History.—Parents were living and well. Five brothers and three sisters were living and well. None were dead.

Examination.—Abdomen was enlarged by a tumor which extended to the level of the umbilicus on the left and to about 3x above the umbilicus on the right. The uneven upper border gave an impression of lobulation. The tumor was firm, smooth and sensitive to palpation. A small-pear-shaped mass was felt on the anterior surface of the tumor just above the pubis. The labia were normal, the clitoris was not enlarged, and the introitus was virginal. On rectal examination no pelvic structures were palpable. There was no pubic or axillary hair. The breasts were small, rounded and firm. The x-ray shadow was that of a soft tissue tumor, and the Friedman test was negative.

*Patient of Dr. W. R. Vaughan, Plainwell.

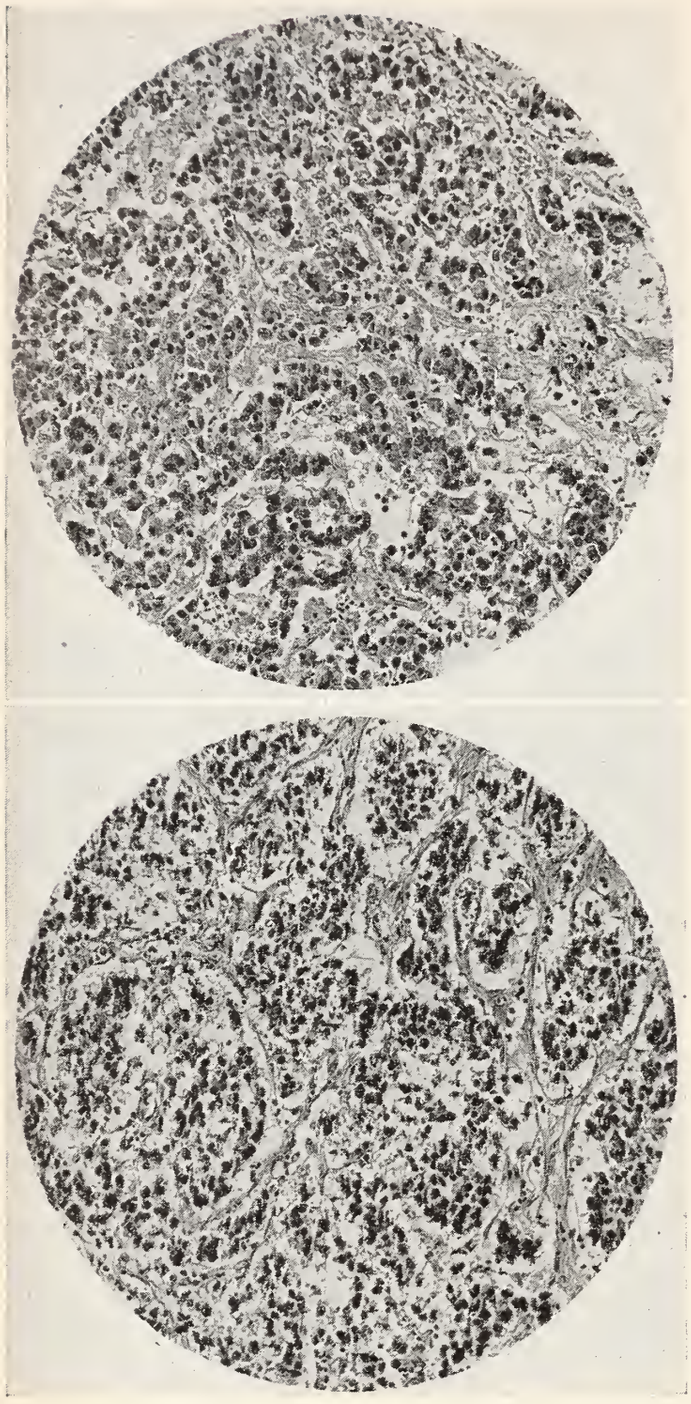

Fig. 2. Photomicrographs show alveolar arrangement of large polyhedral cells with hyperchromatic nuclei. Degeneration obscures histological detail.

Operation, October 30, 1947.—There was a small amount of straw-colored peritoneal fluid. A large, lobulated tumor, pinkish-gray in color, springing from the right ovary, lay entirely within the peritoneal cavity. There were no adhesions. The right tube, long and edematous, was stretched across the surface of the tumor. The uterus, somewhat elongated, was drawn out of the pelvis and lay on the anterior surface of the tumor. The left tube was normal. The left ovary was small, flat, with a dull bluish-gray color. Right salpingo-oöphorectomy was done. Further exploration of the pelvis and abdomen was negative. The postoperative course was uneventful. Her third menstrual period due at this time occurred during the postoperative period, lasted five days, and was normal.

Pathological report by Dr. A. De Groat, pathologist, Borgess Hospital. Gross examination: The specimen consists of an oval, coarsely lobulated tumor, weighing roughly three kilograms and measuring 24 by 17 by 11 cm. Cut surfaces are firm, rather slippery, and yellowish, giving an "encephaloid" appearance. The tissue is divided into small and large lobules by white fibrous septa. Attached is an elongated but otherwise normal fallopian tube, which measures 11 by 1.0 cm. This is stretched across the mass close to the pedicle.

Microscopic examination: The tumor is made up of solid masses of round and polyhedral cells with moderately large, hyperchromatic, vesicular nuclei. Nucleoli are not conspicuous. No adenomatous or papillary structures are found. Degenerative changes are marked and the cytoplasm, which is abundant and clear where cells are intact, tends to disappear, leaving bare nuclei. A few areas show lymphocytic infiltration of the stroma. In wide areas the stroma is empty. No normal ovarian tissue is detected.

Diagnosis: Dysgerminoma of the ovary.

Subsequent Course.—Follow-up examinations have been made every three months. No x-ray treatments were given in order to conserve possible function in the left ovary. Following the operation there were three normal menstrual periods at twenty-eight-day intervals and lasting five days. There has been no menstruation since. At the time of the last examination (September 15, 1949) no evidence of metastasis could be found. On recto-abdominal palpation the uterus was small, hard and freely movable. No other structures or masses were felt in the pelvis. The patient has gained in weight, feels well, is ambitious and enjoys her work as a clerk.

Summary

1. A few points from the literature on dysgerminoma are recorded.

2. A case of dysgerminoma in a girl of sixteen, involving the right ovary with a rudimentary left ovary, is reported.

3. That this patient is well and free from metastasis at the end of two years lends support to those who advocate conservative surgery for this type of the disease.

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Management of Disease of the Biliary Tract

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WHEN one considers that "15 per cent of people in the United States suffer from biliary disease and this figure increases to 30 per cent among individuals beyond forty-five years of age,"[9] the enormity of the problem of disease of the biliary tract can be seen. Of course, these are not all surgical patients, and with proper care a large proportion of them may be spared operation. The surgeon is called in to see the complications. These usually occur in the weakest links of the biliary chain. Considering the liver, hepatic ducts, gall bladder and common duct as links in this chain, the surgical problems are mainly in the gall bladder and common duct. While the disease process may manifest itself in one or more of these links, it must be remembered that it is not confined to that link but involves the entire biliary system.

Experimental work as to the probable causes of cholecystitis have given us rational basis for medical and surgical treatment. Doubilet and Mulholland,[8] by operative cholangiography in man and by the demonstration of pancreatic juice in the gall bladder and common duct, have shown that a common passageway between bile and pancreatic ducts frequently exists. Thus, reflux of bile into the pancreatic ducts and pancreatic juice into the biliary tract is possible. That pancreatic juice can cause cholecystitis in man has been proved.[10] Numerous experiments in which the cystic duct is ligated and the gall bladder allowed to concentrate its own bile, or in which concentrated solutions of bile salts have been placed in the gall bladder, have all shown the ability of concentrated bile salts to produce cholecystitis. Womack[17] says that the inflammation produced seems to be almost in direct proportion to the concentration of the bile. Cole,[5] working with dogs, produces flaps causing obstruction of the cystic duct. In every instance when a definite obstruction of the cystic duct was produced, a severe grade of chronic cholecystitis consisting of fibrosis, lymphocytic infiltration, et cetera, similar or identical to that seen in human beings, was produced. Maximum effects are not noted until at least two years have elapsed since production of the obstruction. Gallstones were produced on two occasions.

Stasis and infection is the combination which Andresen[1] believes to cause gall-bladder disease. Cole,[5] however, found that in only 30 per cent of cases of experimentally produced cholecystitis was culture of the gall-bladder wall and bile positive. Gatch[10] feels that infection is seldom a primary cause of cholecystitis but that it is not unimportant as a secondary factor.

Metabolic changes may also be a factor in cholecystic disease such as the cholesterol elevation in hypothyroidism and pregnancy. Robertson[14] concluded that pregnancy was not a factor. A study of the postmortem records at the Mayo Clinic showed that 83 per cent of the women with gallstones had had pregnancies and that 79.9 per cent of the women having gallstones at operation had had pregnancies. Since 20 per cent of the women in the United States have no children, there appears to be no increase in gallstones in parous women.

To this list of causes of cholecystic disease, Rehfuss[13] adds allergy. While this may be an added factor in some cases, it is our opinion an uncommon finding.

Thus, we have so far considered as causes of biliary tract disease:

1. Pancreatic regurgitation.
2. Concentrated bile.
3. Stasis.
4. Infection.
5. Metabolism.
6. Allergy.

With these causative factors in mind, treatment can be put on a rational basis. This includes prophylactic as well as therapeutic measures. For the purpose of treatment the first three of the causes may be considered together. Stasis occurs due to lack of stimulation of the emptying function of the gall bladder or due to an obstruction. When stasis is present, the bile becomes concentrated in the gall bladder by the ability of the gall bladder to absorb water from its contents. When stasis is caused by an obstructing mechanism, whether stone, inflammation or spasm of the sphincter of Oddi, and if this occurs distal to the junction of the pancreatic and bile ducts, then regurgitation of pancreatic fluid into the biliary tree may occur. If the obstruction is complete, operation is indicated early. Much can be gained where the ob-

much can be gained by medical treatment, even though surgery is to follow for stone or for an unrelaxing sphincter of Oddi. First the sphincter mechanism should be relaxed if possible with the antispasmodic drugs such as atropine. This is frequently used in combination with small amounts of barbiturate. Some patients will not tolerate atropine and other antispasmodics such as trasentine, et cetera, may be used. Along with relaxing the sphincter, the emptying function of the gall bladder should be stimulated. Cholagogues such as the bile salts, magnesium sulfate, aloes, et cetera, may be given. Andresen[1] has pointed out that normal stimulation of the emptying of the gall bladder is produced by the presence of emulsified fat in the duodenum. Formerly all patients with biliary tract disease were placed on low-fat diets as there was less danger of provoking an attack. Many patients automatically place themselves on this diet as they find that fatty foods cause distress. However, this low-fat dict only produces more stasis and furthers the progress of the disease. Therefore, the patient who for any reason is postponing operation, the patient with non-calculous cholecystitis and the cholecystectemized patient, all should be given high fat diets. The best tolerated fatty foods are butter, cream, eggs and olive oil. Better patient co-operation will be obtained if these are added to the diet slowly and to the patient's tolerance. It should also be explained to the patient that his symptoms may be increased temporarily but that they will ultimately decrease.

Frequently when the stomach is examined by x-ray in patients with cholecystitis, there is found to be a rapid emptying time associated with low gastric acidity. Much of the belching and bloating that these patients complain of can be eliminated by the use of hydrochloric acid itself or by the glutamic acid preparations which are easier to take.

With the reduction of stasis there is less chance of infection occurring in the biliary tree. The sphincter of Oddi seems to be an excellent guardian against ascending infection so that this path is rarely the route of infection into the biliary tree.[1] Cholecystitis does, however, frequently follow infection in other parts of the body such as the intestinal, respiratory or genital tract. Because of this, foci of infection should be carefully searched for and eliminated in these patients.

A discussion of the treatment of metabolic and allergic disorders is not within the scope of the paper. Suffice it to say that should a patient with symptoms of cholecystitis have one of these disorders, treatment of that disorder would be undertaken by a physician competent in that field concomitantly with treatment of the cholecystitis.

It has been recommended[6] that all patients with the slightest symptoms of indigestion be x-rayed to determine early the presence of gastrointestinal malignancy. So too should these patients have x-ray studies made of the gall bladder to determine its status. This is not to minimize a careful and detailed history and physical examination which are of prime importance. Belching, bloating, gas eructations and complaints of pain either abdominal or thoracic should be investigated with the biliary tree in mind as a possible or probable offender. Gallstone colic or the acutely inflamed gall bladder with localized tenderness, spasm or a palpable empyema are rarely missed, but the patient with indigestion may be allowed to go with only palliative treatment and without a thorough investigation.

The results of x-ray examination of the gall bladder have been divided as follows:[15]

Group I.	Stone positive.
	(a) Calcareous.
	(b) Non-opaque.
Group II.	Absence of shallow.
	75% have stones.
	15% have extensive disease of the gall bladder without stones.
	7-8% have extrabiliary tract disease such as cirrhosis and carcinoma.
	2-3% are errors.
Group III.	Pathologic non-calculous.
	Lack of concentration of filling or emptying power.
	10% have stones.
Group IV.	Normal.
	95-97% accurate.

Where there is definite x-ray evidence of stones we believe that with few exceptions the patient should be operated upon. The dangers of perforation, common duct stone and associated hepatitis or pancreatitis with the possibility of pancreatic fat necrosis far outweigh the operative risk in most patients. We must also remember that 95 per cent of carcinoma of the gall bladder is associated with stones. These dangers can be well illustrated by the series of Jaguttis.[4] He followed 114 patients with cholelithiasis treated conservatively for twenty-five years. Five patients died of cancer of the gall bladder. This is a high percentage, as the

average is 2.5 per cent of cases in which gallstones are present. Thirteen cases died of cholecystic disease. Twenty-five cases were operated on for complications, and four of these died. This adds up to a terrific mortality rate not to consider the morbidity involved in these 114 cases. When we compare these figures with an operative mortality of less than 1 per cent when cholecystectomy alone is done,[3] we can see little excuse for allowing gallstones to remain as a Damoclean sword to threaten the patient. It might be well to point out that the mortality from operations on the biliary tract is now less than one-tenth that of fifteen years ago. Thomas G. Orr[12] reports:

Mortality rate of all operations upon the biliary tract.

1931-1936 5.6%
1936-1941 3.7%
1941-1946 0.4%

Our own figures for 451 cases from 1942 to 1947 show a mortality rate of 0.9 per cent where cholecystectomy alone was performed.

Not only should gallstones as a rule be treated surgically, but every effort should be made to discover them early and remove them before the patient gets into the older age groups. Glenn[11] reports that the mortality in acute cholecystitis, in the group over fifty, is almost five times as great as in the group under fifty. His figures in 527 cases operated at The New York Hospital are:

Over 50 years of age—mortality rate, 5.14%
Under 50 years of age—mortality rate, 1.13%

It is in the next group of patients, those with absence of shadow by x-ray, that a good history and physical examination are of greater importance. Our interpretation of the x-ray findings is colored by the patient's history. If the patient has had chills and fever and typical colic, we usually can be certain that the patient has stones. The usual figure is given as 75 per cent of these cases containing stones. By operating only in the cases in which the history and physical findings fit in with the x-ray results, 86 per cent of the patients with non-visualization whom we operated upon had stones.

In the third group, consisting of impaired function, only 10 per cent have stones. Great care must be exercised here in deciding upon operation. Two-thirds of our operative cases in this group had stones. The majority of these cases are best treated medically and rechecked by x-ray from time to time. Many of these will later give normal x-ray pictures.

Patients with normal function by x-ray should not have operation on the gall bladder unless it is for exploration along with suspected lesions elsewhere. All of our cases with normal gall bladder by x-ray had no stones at time of operation.

Whenever possible, it is well to have an electrocardiogram, x-ray of the chest and gastrointestinal system as well as a Graham-Cole test. These examinations help to eliminate the puzzling cases of gall-bladder disease associated with diaphragmatic hernia, gastric and duodenal ulcer, carcinoma of the pancreas, ampulla of Vater and transverse colon, duodenal diverticula, right lower lobe pneumonia and appendicitis in a high appendix, especially if it is retrocecal.

Cardiac conditions, usually coronary sclerosis or occlusion, are frequently confused with biliary tract disease. To make matters worse, they frequently occur in the same patient. Wakefield[16] states that "disturbances in cardiac rhythm frequently accompany gallstones" and further, by means of the electrocardiograph he has shown that distention of the human gall bladder can cause "changes in heart rate, disturbances in rhythm and conduction and some alteration of the T waves."

Breitwieser,[2] in a study of seventeen cases of calculous cholecystitis and one case of non-calculous cholecystitis, all of which had abnormal preoperative tracings, found that "including those with cardiac symptoms as well as those without, 50 per cent showed reversion of the T waves toward normal following gall-bladder surgery." It was Wakefield's conclusion that "in properly selected cases, cholecystectomy frequently restores regular heart rhythm and at least ameliorates anginal pain." This agrees with our clinical findings that many patients who complain of cardiac symptoms before operation, lose these complaints or at least they are frequently lessened after operation. However, recent thrombosis or decompensation contraindicated operation, as a rule. In exceptional cases we have performed cholecystostomies for acute cholecystitis in severe cardiac patients under local anesthesia with the patient in a semi-sitting position.

Poor results following operation have in the past been attributed to insufficient care in diagnosis or to operations done by inexperienced surgeons with incomplete operations or accidents involving the common duct or hepatic or portal vessels. The first of these causes of poor results we try to eliminate in our own cases by operating only in those

cases in which we can be assured that stones are present. As to the second cause of poor results, the best of surgeons still have accidents in the porta hepatis and everyone is aware of the dangers of operating in this area. Any surgeon operating on the biliary tract should not only be familiar with the anatomy involved but with the many types of accidents that may occur. He should, in addition, know the methods of repairing any accidental damage that may occur.

There is a third consideration which is frequently overlooked, and that is preoperative and postoperative care, not only in the hospital but before hospitalization and after leaving the hospital. A fourth consideration which can be discussed with the third is that often too much is expected of the operative procedure. It must be remembered that operation is performed for the complications of biliary tract disease. If the dangers attendant to that complication can be removed, then the operation has benefited the patient. If the disease has been cured by operation, then surgery has achieved a higher goal. Cholecystic disease is usually only a part of disease of the entire biliary tree and may involve adjacent organs such as the liver, pancreas and duodenum. Cholangitis, hepatitis, pancreatitis, gastritis and duodenitis must be treated, and we cannot expect cholecystectomy alone to cure them. The diet with ample fat suggested in the early part of this paper, together with the antispasmodics, cholagogues and sedatives, can be adjusted to a bland diet to overcome inflammation of the gastrointestinal system. Adequate amounts of carbohydrates and amino acids may be given along with the vitamins for liver protection. Occasionally, patients that do poorly after operation may have a sphincter of Oddi which will not relax even under medical treatment. If there is a junction of the common duct and the pancreatic duct above this sphincter, then there may be a reflux of bile into the pancreatic ducts, or vice versa, to produce choledochitis. These cases may need reoperation and severing of the sphincter, as advocated by Colp and Doubilet.[7] They have perfected an instrument which can be passed into the duodenum through the common duct and sever the sphincter without the necessity of opening the duodenum.

Summary

There are many reports in the literature that a high percentage of our population is or will be affected by biliary disease. Progress of the disease in many cases may be arrested and complications, including the formation of stone, prevented, by the use of a diet high in fats, along with antispasmodics, cholagogues and the elimination of foci of infection. Therapy is based upon evidence that the main causes of cholecystitis are pancreatic regurgitation, concentration of bile, stasis and infection. When complications develop, then operation should not be long postponed. Stone formation is considered a complication which in most cases should be surgically treated. The best surgical results will be obtained by:

1. Operating only when there is assurance that stones are present.
2. A carefully and adequately performed operation.
3. Prolonged preoperative and postoperative care as described.
4. Treatment of associated inflammations, diseases and disorders.
5. There will be some cases in which results will not be satisfactory until a section of the sphincter of Oddi is performed. Probably the best method of sphinctotomy is that of Colp and Doubilet.

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MSMS

The Government is building hospital buildings for various services, Army, Navy, Public Health, Veterans Administration. As a result of the Hoover survey the President cancelled two hundred eighty-four million dollars worth of Government hospital buildings some months ago, but pressure upon the Congress restored every dollar of that amount with orders to construct those buildings. A study of efficiency in Government hospitals shows a tonsillectomy in private or civilian hospitals averages 1.4 hospital days. Hospitalization in Public Health service hospitals average 6.8 days, in Veterans Administration hospitals 15.1, and in Army hospitals 16.1 days—other services in proportion.—*Hoover Commission Report.*

Indications for Surgery in Gall-bladder Diseases

By Robert M. Zollinger, M.D., and
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DESPITE THE ever-improving morbidity and mortality rates in biliary surgery, many physicians still hesitate to advise cholecystectomy except in the presence of serious complications. This attitude in the profession has been fostered by follow-up reports of unsatisfactory results in former years. Furthermore, patients themselves not uncommonly refuse operation, not for fear of a risk of death which is less than one in a hundred, but because of the "rumor" that they may continue to suffer afterwards from the same symptoms which brought them to the physician in the first place. It must therefore be accepted that enough of these "symptomatic failures" occur to color the view of both physician and patient, and to result in some instances in disastrous procrastination.

The difficulty ought not to lie in establishing a diagnosis. The demonstration of a pathologic gall bladder by means of cholecystography is very accurate. The principal problem seems to exist in correlating symptoms with the cholecystogram, and in predicting with some exactness the degree of relief to be obtained by operation. If the complaints of the patient have been minimal and no striking symptomatic benefit is to be expected, both physician and patient must weigh the attractive aspects of an indefinite postponement of operation against the risk of serious complications in the future, such as acute cholecystitis or common duct stone.

Individualization of cases is essential if physician and surgeon are to obtain consistently good results. Each patient must have a thorough survey with particular reference to the possible coexistence of other disorders before being subjected to operation. The best results follow biliary surgery in the patient who has had colic and in whom gallstones are found at operation. Conversely, poor results are obtained in the patient whose complaints have been vague and mild and whose gall bladder showed little pathologic change. Even if the patient has had the classical syndrome of biliary colic sufficiently severe to require narcotics, a confirmation of the diagnosis by cholecystogram and a thorough study of the entire gastrointestinal tract are advisable before recommending operation. The physician can conveniently carry out such a survey while judging the "pro's" and "con's" of early surgery. The final decision will then be based upon a careful evaluation of all data, and if operation is to be recommended largely for preventative considerations, the patient can be so informed.

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Surgical Implications of Cholecystograms

Since the diagnosis of gall-bladder disease is so easily confirmed by means of cholecystogram, this method of examination should be utilized routinely for guidance in the selection of patients for operation. Excellent results from operation can safely be predicted for the patient with colic if stones or milk of calcium bile are demonstrated at the time of cholecystogram. It will be recalled that only about 5 per cent of all gallstones have sufficient calcium to show up on the plain x-ray of the abdomen. Under our plan of selection, about 95 per cent of the gall bladders removed have contained stones. The patient who has gallstones without colic is discussed under "silent gallstones".

A second group of patients will show no filling of the gall bladder on cholecystogram and consequently no demonstration of gallstones. Unless there has been a history of typical gallstone colic severe enough to require narcotics, a repeat cholecystogram with reinforcement of the dye is very desirable. In the group will be found some patients complaining of vague epigastric distress, flatulence, and food intolerance. Since carcinoma of the stomach or colon, for example, may produce symptoms simulating gall-bladder disease, the physician should insist upon a complete x-ray survey of the gastro-intestinal tract. In these patients, it is usually a mistake to promise freedom from all complaints after operation, and it is often advisable to postpone operation.

The cholecystogram in a very few patients may show irregularities of the gall bladder suggesting a tumor such as an adenoma. These patients deserve a cholecystectomy, as prophylaxis against malignancy. Much change in their symptomatology is not anticipated if their complaints have been mild and variable.

Too much emphasis is sometimes placed on poor filling, delayed emptying, or an unusual size or shape of the gall bladder. In such instances we do

not advise cholecystectomy unless the patient has had repeated attacks of gall-bladder colic. On the other hand, we have observed patients with normal cholecystograms who continued to have repeated severe attacks of colic. Despite the negative cholecystogram, very small calculi were found at the time of cholecystectomy. Relief of symptoms was obtained.

Although the high degree of accuracy of cholecystography is universally acknowledged, it is well to remember that it is only a confirmatory laboratory test and as such must fit in with the clinician's evaluation of the patient. A non-filling of the gall bladder in one examination should not be considered an absolute indication for operation in the absence of classical, severe symptoms. A few patients will not take all of the gall-bladder dye, or may vomit or regurgitate some of the ingested dye. There may be gastric retention of the dye especially in a patient with an active duodenal ulcer, or, for some other reason absorption may be faulty and a normal gall bladder cannot be visualized. For this reason we invariably recommend in doubtful cases a repetition of the cholecystogram, and we question the patient closely regarding the amount of dye ingested and retained. It should be noted that cholecystography is of no diagnostic aid in the jaundiced patient, since an impaired liver will interfere with concentration of the dye by a normal gall bladder. There is no better way to improve the results in biliary surgery than to avoid operation on those patients with vague symptoms and questionable evidence of gall-bladder disease as shown by cholecystogram.

Cardiac Patients with Gall-bladder Disease

It is a common observation that a diseased gall bladder may produce symptoms which mimic cardiac disorders. Most cardiologists are firm in their conviction that it is beneficial to the patient to have a diseased gall bladder removed in the presence of cardiac disease which may include a previous coronary thrombosis. Their confidence has not spread to the medical profession at large, and is rarely shared by the individual patient. In our opinion cardiovascular disease does not alter the surgical indications in acute cholecystitis, in recurrent colic from a diseased gall bladder, or in suspected common duct stone. Gall-bladder attacks may actually intensify heart disease by precipitating congestive failure or aggravating attacks of angina pectoris. Although gall-bladder pain may mimic or coexist with cardiac pain, a congested tender liver may also simulate a tender gall bladder. Precise information must be had as to the cardiovascular status, and there must be an accurate estimate of the severity of the gall-bladder disease, as well as irrefutable evidence by cholycystography that the gall bladder is nonfunctioning. These patients do exceedingly well if sufficient time is taken to stabilize the cardiovascular system at an optimal level prior to operation. We have found the daily determination of vital capacity to be of great assistance in determining the optimum time for surgery in the poor-risk "cardiac". It has been our policy to delay operation until the vital capacity exceeds 1500 c.c., and we prefer to see it greater than 2,000 c.c.

In University Hospital there have been twenty-four patients with clear-cut cardiovascular disease undergoing operation for gallstones in the past two and a half years. This is approximately one patient in ten. They tolerate this type of operation well, even when exploration of the common duct is indicated. There were no deaths in this group, although eleven patients were more than sixty years of age.

There is no more grateful patient after operation than the "cardiac" who has suffered repeated attacks of gall-bladder colic over a period of years, and who has previously been denied the benefits of surgery because of the unwarranted fear on the part of the physician that the risk was too great. Furthermore, it is not uncommon to have the so-called "cardiac symptoms" disappear after operation. The increasing age of our population makes this problem especially important.

Silent Gallstones

One of the most controversial subjects in gall-bladder surgery concerns advice to the patient with so-called "silent" gallstones. The gallstones may be found at the time of pelvic operation or noted as a result of a gastrointestinal investigation for vague abdominal complaints. In deciding whether cholecystectomy is in the best interest of such a patient, the physician may be influenced by the size and number of stones. The large solitary calculus is less likely to cause difficulty than small stones which might either block the cystic duct or escape into the common duct. The physician must be on the alert for the confirmed psychoneurotic with a so-called "gastric neurosis", which originally led to the gastrointestinal survey and demonstra-

tion of choleliathiasis. If a cholecystectomy is recommended in the wild hope of relieving all symptoms in such a patient, both the physician and patient are doomed to disappointment. However, if the patient has an associated disorder such as duodenal ulcer, pancreatitis, or heart disease, operation should usually be urged even if the symptoms attributable to the gall bladder are mild in character. Control of a duodenal ulcer is more difficult in the presence of gallstones due in part to the fact that these patients cannot tolerate well the ulcer type of diet. The patient wih cholelithiasis who suffers recurrent bouts of pancreatitis must be strongly suspected of having a common duct stone. The physician must weigh the risk of surgery in the early stages when the diseased gall bladder or gallstones are discovered against the possible higher mortality rate from such complications as acute cholecystitis, common duct stone, or cancer of the gall bladder which may occur in later years. Although a substantial number of patients may harbor gallstones over many years without experiencing any symptoms, it is dubious whether delay in anticipation of recurrent symptoms is actually safer for the patient.

A study of our patients shows the median age in uncomplicated gall-bladder disease to be about forty-nine years. In acute cholecystitis it is fifty-five years, and in common duct stone it is fifty-seven years. As would be expected, the proportion of patients sixty years of age or more increases with the complications. For example, in uncomplicated gallstones, only 17 per cent of the patients are over sixty years of age. In all cases of gallstones it is 26 per cent, or one in four. In acute cholecystitis and common duct stone, almost 50 per cent of the patients are in the old age group. In the complicated cases, the history usually shows that the patient has suffered multiple attacks. It may be concluded that earlier operation in these cases would not only have reduced the operative risk several-fold but would also have spared the patient much suffering.

This is not meant to imply that every patient with silent gallstones should be rushed into operation. Operation is justifiably postponed in the obese patient until there has been a drastic reduction in weight. But the middle-aged patient should be apprised that he stand a very good chance of living long enough to develop serious trouble from his gallstones, necessitating operation at a later date and entailing greater risk. It should be recalled that 1947 statistics show the life expectancy for females to be 70.6 years and for males, 65.2 years. It is even greater for persons who have already attained middle age.

Acute Cholecystitis

There is little disagreement today among surgeons regarding the advisability of hospitalizing a patient as soon as the diagnosis of acute cholecystitis has been made. We are in accord with the principle that early operation should be considered in good risk patients within twenty-four to forty-eight hours of the onset of symptoms. Unfortunately it is rarely that the surgeon sees the patient before this period has elapsed. In approximately three-fourths of the patients, an attack of acute cholecystitis will subside under conservative management, but in the remaining patients it becomes worse and early surgical intervention becomes mandatory. Frequent re-evaluation is essential both by means of bedside visits and by laboratory aids, in order to determine the optimum time for operation. After fluid balance is established, exacerbation of pain which requires narcotics, increasing signs and symptoms in the region of the gall bladder, or early evidence of a developing peritonitis calls for surgical intervention. The possibility of gangrene or a perforation of the gall bladder should be considered if the white count exceeds 20,000. We are convinced that the mortality rate associated with acute cholecystitis will be lowered if patients are operated upon at anytime during the day or night when they fail to show evidence of continued improvement. If the surgeon takes advantage of the cleavage planes developed by the acute inflammatory process in the wall of the gall bladder, it is possible to do a complete cholecystectomy in the majority of cases without excessive loss of blood. However, if an abscess is encountered or the technical approach seems unduly difficult, the procedure of choice may be simple drainage of the gall bladder with removal of as many calculi as possible. Occasionally a cholecystostomy under local or regional anesthesia will be a life-saving procedure in the very ill poor-risk patient.

If the patient is seen late in the course of the disease with decreasing signs and symptoms, or if he is an elderly "poor risk", conservative management is justified as long as improvement is steady; operation can then be performed as a semi-elective procedure some five or six days after hospitalization. No striking benefit is to be expected from antibiotics preoperatively, due to the fact that acute

cholecystitis is so often due to a chemical irritation from a stone blocking the cystic duct, rather than bacterial invasion.

Common Duct Stone

The presence of common duct stones is usually suspected on the basis of a history of jaundice, colic, vomiting, chills and fever and a more remote past history consistent with the diagnosis of cholelithiasis. All too frequently the diagnosis is not considered unless the patient is jaundiced at the time of operation.

An analysis of our cases with common duct stone showed some interesting facts relating to jaundice. For example, in twenty-one patients who were jaundiced while in the hospital, common duct stones were recovered in fifteen, or nearly three-fourths. On the other hand, a common duct stone was found in only four out of twenty-four cases in patients giving a past history of jaundice. It is of considerable interest that a common duct stone was recovered in twelve out of twenty-five patients who had never given a history of jaundice. It is apparent from these observations that jaundice should not be the only indication for exploration of the common duct.

In a study of technical criteria for exploration, we have found at operation that the size of the common duct in relation to normal is of considerable significance. In twenty-nine cases the common duct was described as quite large, and stones were recovered in seventeen of these cases. Likewise, stones were recovered in ten out of twenty-two ducts which were described as moderately enlarged. In only one case out of ten was a stone recovered when the duct was described as normal. It may well be that a fair percentage of the unsatisfactory results of gall-bladder surgery in the past has been due to the fact that an insufficient number of patients have had the common duct thoroughly explored.

The surgeon rather than the physician must be concerned about the possibility of a common duct stone because of his responsibility for exploring thoroughly the extra-hepatic biliary ducts. It has been our finding that approximately one-half of all patients subjected to cholecystectomy deserve an exploration of the common duct. During the past two and one-half years, 47 per cent of the common ducts were explored, and common duct stones were recovered in almost 50 per cent of the ducts explored, or 20 per cent of all cases. The over-all mortality was 2 per cent.

Recurrent Symptoms after Cholecystectomy

The patient who complains of pain or digestive disturbances after biliary surgery may present a very thorny problem. Usually the trouble is ascribable to one or more of three fundamental reasons: (1) Incorrect preoperative diagnosis including poor selection of the patient for surgery. Attention to the principles already outlined will help reduce this group to a minimum. (2) Incomplete surgery or complications resulting directly from surgery. (3) Residual, non-operable disease of the biliary tract, the so-called "biliary dyskinesias".

The patient who has had a surgical drainage and removal of stones, without subsequent removal of the gall bladder, is very likely to have a recurrence of symptoms. Complete removal of the gall bladder usually effects a cure. It is therefore important for the physician to obtain an accurate description of any previous operations. Less well recognized is the fact that incomplete removal of the cystic duct may also result in a recurrence of symptoms. While cholecystography is without value in such instances, occasionally a plain x-ray of the gall bladder region will demonstrate calculi. We have recently encountered several patients with biliary colic occurring many years after cholecystectomy. The symptoms were so severe and classical that exploration seemed warranted. At the time of operation a remnant of cystic duct an inch or longer was found containing small stones or gravel. The surgeon must remove the entire cystic duct down to the point where it joins the common duct, if such distressing sequellae are to be avoided.

There is another group of patients in which the symptomatology is due to an overlooked common duct stone. As pointed out previously, unless the common duct is opened in 40 per cent or more of the cases, and common duct stones recovered in about 20 per cent, the best results cannot be expected. Fortunately the number of accidents at the time of biliary surgery resulting in stricture formation are not too common, but all surgical clinics are confronted with a few of these patients every year. It is well for the surgeon to remember that there are more anomalies of blood supply and ducts in the region of the gall bladder than in almost any other part of the body, and great care must be exercised in technique in even the simplest case. Once

the physician has exhausted all forms of medication, and if after thorough investigation of the patient, he is convinced that the patient retains a pathologic condition accounting for symptoms similar to those preceding removal of the gall bladder, exploration is advisable. In a large proportion of such thoroughly screened patients, the difficulty can be corrected.

There is a third group of patients in which residual disease of the biliary tract, including cholangitis, hepatitis, or "biliary dyskinesia" apparently occurs. It is unwise to accept such a diagnosis without a thorough study of the patient, including a complete investigation of the gastrointestinal tract. Early operation with complete removal of all pathologic conditions may decrease the number of such patients, but we know of no specific medication which has been routinely efficient in alleviating symptoms in this group.

Summary

Modern methods have increased the scope and safety of biliary surgery. The results will be satisfactory to patient and physician alike if certain basic principles are adhered to rigidly in the selection of patients, and in the performance of the operation:

1. A proper interpretation of symptoms. This frequently entails a complete x-ray survey of the gastrointestinal tract.
2. Unequivocal evidence of gallstones or gall-bladder disease by means of cholecystography.
3. Complete removal of the pathologic condition at operation. This implies a removal of the gall bladder and entire cystic duct, and recovery of common duct stones in approximately 20 per cent of all patients operated upon and in nearly 50 per cent of those whose common duct is explored.

Elderly patients and patients with cardiovascular disease withstand biliary surgery extremely well and are entitled to its benefits for the same indications utilized in patients without these handicaps.

A more liberal attitude toward cholecystectomy for "silent" gallstones will reduce the incidence of complications of gall-bladder disease occurring in older "poor risk" patients.

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Cancer in the Jewish Race

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THE CANCER MORTALITY in Jews and non-Jews among whom they live is almost identical, according to Polduan,[16] or slightly less in Jews, quoting Horwitz.[11] This is true for both sexes. The cancer peak occurs earlier in life in Jews of both sexes. Though this similarity in cancer rates is true for most forms of cancer such as skin, lip, breasts, and lungs, there are exceptions.

Cancer of the Tongue and Buccal Cavity

Fournier[8] first emphasized the importance of syphilis in the causation of tongue cancer in 1906. Beeson[1] confirmed this, noting that patients with this lesion were more likely to have positive serologies than any other form of cancer. Eller and Anderson[6] in their series found 60 per cent due to syphilis. Belote[2] found that 30 per cent had positive serologies in a study of tongue cancer at the University of Michigan, that cancer of the tongue appeared on the average eight years earlier in syphilitics, and though syphilis was an important factor in the etiology of tongue cancer in the male, it was not in the female. This may account for this lesion being more than four times as frequent in males.

Craig[4] found syphilis of importance in 14.5 per cent and also noted that tongue cancer was uncommon in Negroes despite the high percentage of syphilitics in this race.

Syphilis is less common in Jews due to universal circumcision in this race.[9] This may be the reason that cancer of the tongue, according to Polduan,[16] is at least four times rarer in Jews compared with Gentiles. Cancer of the tongue is extremely uncommon in Jewish women.

Cancer of the Gastrointestinal Tract

Carcinoma of the gastrointestinal tract, including the peritoneum, is twice as common in Jews, a fact which is true for males and females, according to Polduan.[16]

Cancer of the Male Reproductive Tract

Polduan[16] stated from a study of cancer mortality in New York City that cancer of the male

reproductive system is 50 per cent higher in Gentiles. This difference is almost entirely due to the fact that cancer of the penis is almost unknown in Jews. Ravich[13] reported that carcinoma of the prostate also was rare in Jews, a fact not confirmed by Ney and Moody.[12]

Demarquay and Barney found cancer of the penis associated with phimosis in 80 to 85 per cent of cases. The chronic irritation and infection, associated with prepucial adhesions, accumulation of decomposing smegma, and concretion formation under the phimotic foreskin, are certainly important causes of this type of cancer.

Cancer of the penis is very rare in the circumcised. Hoffman[10] stated that this lesion was unknown in Jews, due to the orthodox being circumcised on the eighth day after birth. According to Wolbarst,[17] cancer of the penis is common in Hindus, who almost never circumcise and less common in Arabs, who circumcise in the thirteenth year. Dean[5] confirmed these findings, stating that the early circumcision as practiced by orthodox Jews gave them immunity against cancer of the penis, an immunity they have to no other form of cancer. He believed Arabs had only partial immunity, as they circumcised in the thirteenth year, and strongly advised all males be circumcised very early in life. He did report one case of Grade 2 squamous cell cancer of the external urinary meatus in a Jew circumcised on the eighth day. He believed this to have been due to irritation from the urine. He reported three cases of cancer that started in the scars of circumcision done late in life. He believed cancer does not start in scars that heal by primary intention. Circumcision done early in life usually heals by primary intention.

Ewing[7] found syphilis and phimosis to be the chief causes of penile cancer. This is not likely in the case of syphilis, as some Jews do develop syphilis whereas penile cancer is almost unknown in this race.

Venereal warts also have been given as a cause of this cancer. Venereal warts are almost unknown in the circumcised.[9] Cancer of the penis is rare in the circumcised. Their occurrence together at times could be explained as a pure coincidence.

The rare condition, erythroplasia of Querat, a form of intraepithelial epithelioma found on the glans and foreskin, is very rare in the circumcised.

Cancer of the Female Reproductive Tract

Theilhaber[14] found cancer of the uterus, including the cervix, to be uncommon in Jewish women. Polduan,[16] in a small series of cases, did not find any significant difference. Horwitz,[11] in a study of 1,237 cases of uterine cancer at the Mayo Clinic, found cancer of the uterus in only ten Jews. The reasons for this difference has been the subject of considerable conjecture.

Cancer of the uterus is almost entirely confined to women who have borne children, the average births being five, which is higher than the average. This is also true of those rare cases of uterine cancer seen in Jewish women. It is well known that Jewish women have large families and that cervical tears and lacerations are common in this race. Despite this, carcinoma of the uterus, including the cervix, is rare in this race. Vineberg[15] found this to be so even in those with extensive cervical tears.

Bessesen[3] perhaps facetiously discussed the possibility that cancer of the penis was due to a virus that grew in the smegma beneath the phimotic penis and that this same virus was carried to the cervix during coitus, causing cervical cancer. He wondered if this could account for the extreme rarity of cancer of the penis in Jews and the rarity of cervical cancer in Jewish women.

Ewing[7] mentions that fibromyomas may be of etiologic importance in uterine cancer, but these are common in Jewish and Negro women in whom uterine cancer is less common than in other women.

Vineberg[15] believed that observance of the Mosaic law, forbidding coitus during the seven days after menses and also for a time after childbirth, might account for the infrequency of this form of cancer in Jewish women. He also wondered how many followed these rules, humans being as they are.

Syphilis, with associated precancerous leukoplakia of the genitalia, and gonorrhea, with associated chronic inflammation, are less common in the Jewish race. Perhaps this may account for the difference in frequency of cancer of the female generative tract in Jewesses and Gentile women.

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Head and Neck Cancer in Detroit

Statistical Survey in 1946

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CANCER OF THE head* and neck represents about 4 per cent of all cancers. Its low incidence is attended by a high mortality rate and still higher morbidity. The infrequent occurrence of this condition as seen in daily practice tends to delay prompt diagnosis and treatment. Variously treated by oral surgeons, otorhinolaryngologists, radiotherapists, general surgeons, and sometimes by dermatologists, with responsibility ofttimes amongst several physicians, the criteria governing treatment and management of these patients are not always standardized.

Knowledge of the total hospital incidence of cancer in a community, as compared to statistical analyses from single institutions and Health Department Vital Statistics, is sorely lacking. Some of it can be obtained without too great effort. Often, it is very important information from the viewpoint of the patient who receives his treatment in the average hospital, not the Cancer Center or the University Clinic.

For these and similar reasons, it was thought that a composite picture of cancer of the head and neck in the hospitals of a large metropolitan community would be worthwhile.

Method

The hospital record rooms and x-ray therapy departments of all the hospitals in Detroit and its metropolitan area were contacted.** The charts of all patients with cancer of the lip, floor of the mouth, tongue, buccal mucosa, upper and lower gums, mandible, tonsil, tonsillar pillar, sinuses, nasopharynx, hypopharynx, palate, and larynx (intrinsic and extrinsic) who were treated in 1946 were studied. Co-operation was graciously extended everywhere. Only those patients were included whose treatment was started in 1946. Treatment may have been given as an outpatient or regular hospital admission. When a patient was seen at a hospital, and only a biopsy obtained, the case was not included in the survey. Our main interest centered on the total number of cases, the stage of disease (early, moderately advanced, or advanced), and whether treatment was by surgery, irradiation, or both.

The purpose was to get a brief but over-all study of these patients as they were treated in the hospitals of a large metropolitan area in one year.

TABLE I. CARCINOMA OF MOUTH AND LARYNX IN DETROIT, 1946

HOSPITALS AND BEDS

Number of Hospitals	Beds	Total Beds	Cases
8	300—500	3576	249 (95.77%)
22	50—299	2469	11 (4.23%)
17†	10—49	601	0
Total 47		6646	260

†Five institutions containing a total of 277 beds not included.

General Considerations

Collected in the above manner, we found that there were 260 patients with carcinomas of the mouth and larynx treated in all of the Detroit hospitals in 1946 (Table I).† It can readily be seen that practically all (96 per cent) were cared for in the eight major hospitals of 300 to 500 bed capacity. These eight hospitals comprised about half of the total bed capacity of the city. A number of small institutions under fifty beds were included since they all had operating rooms, x-ray diagnostic units and laboratories, and cared for routine major surgical and medical cases.* There were no mouth or larynx cancer cases treated in any of these small hospitals of less than fifty beds.

The reason for the concentration of these patients in hospitals of 300 and over is not entirely clear, but is due partly to the fact that the larger institutions have radiation therapy departments which attract many patients with mouth and laryngeal cancer. In addition, the problems and techniques incident to the care and treatment of these patients cannot be adequately met at all hospitals.

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*Exclusive of the brain.

**Cases treated in doctors' offices (e.g. Oral surgeons, x-ray laboratories, etc.) would not be included in this data.

†In 1946, the Health Department listed the following compilation of deaths from cancer of the mouth and larynx:

Lip	5	Pharynx	20	Mouth	11
Tongue	20	Larynx	25	Jaw	1

Total 82

These included only cases registered as having died in the City of Detroit. The estimated population of Detroit in 1946 was 1,785,000; that of the metropolitan district was 2,226,100.

*Psychiatric, tuberculosis, and contagious disease beds were omitted in this survey. Obstetric and pediatric beds in general hospitals are included in the total number of beds.

Special operative procedures, nursing care, and supportive measures are often obtainable only at larger institutions. The fact, too, that these patients are treated by specialists in one or other branches of medicine would also tend to concentrate them in the larger institutions.

The data collected comprised an appraisal as to whether the case was early, moderately advanced, or advanced, and whether the treatment was by surgery, by x-ray and radium, or by a combination of both methods. The criteria for determining the stage of the disease were as follows:

Early.—A tumor 1.5 centimeters or less in size without extension, invasion, or metastasis. In the larynx, when limited to one vocal cord alone.

Moderately Advanced.—A tumor 1.5 to 2.0 centimeters or more in diameter with some local extension. This extension is minimal. There may be surrounding induration about the primary, but not involving adjacent areas to the point of complete inability to swallow, talk, or perform normal functions. Tumors with metastasis to the neck are included in this stage only if these metastases are small and readily amenable to treatment. A curable lesion.

Advanced.—Any statement on the chart as to clinically advanced or extensive disease. Large metastases to neck nodes or below the clavicle. A long clinical history and obvious emaciated or cachectic state: inability to swallow, pain on swallowing, much weight loss, and marked involvement of local areas about the primary tumor. All hopeless cases are included in this category.

TABLE II. TOTAL PATIENTS TREATED IN ALL HOSPITALS IN DETROIT IN ONE YEAR, 1946

TABLE IIA—Anterior Mouth

	Total	Stage			Treatment			
		Early	Mod. Ad.	Adv.	Surg.	X-ray	Both	No. Rx
Lip, Upper	9	6	3	0	3	5	1	0
Lip, Lower	52	26	19	7	15	34	3	0
Floor of Mouth	16	3	7	6	3	10	0	3
Tongue	56	4	26	26	4	35	9	8
Buccal Mucous Membrane	5	1	4	0	0	5	0	0
Gums	5	0	2	3	0	4	0	1
Mandible	2	0	1	1	1	1	0	0
Total	145	40	62	43	26	94	13	12

TABLE IIB—Posterior Mouth

	Total	Early	Mod. Ad.	Adv.	Surg.	X-ray	Both	No. Rx
Tonsil	11	1	5	5	0	9	2	0
Tons. Pillar	5	0	2	3	4	1	0	0
Sinus	3	1	1	1	0	1	2	0
Nasopharynx	11	1	4	6	1	10	0	0
Pharynx (Hypo)	9	0	1	8	0	8	0	1
Palate	10	0	6	4	2	7	0	1
Total	49	3	19	27	7	36	4	2

TABLE IIC—Larynx*

	Total	Early	Mod. Ad.	Adv.	Surg.	X-ray	Both	No. Rx
Intrinsic	23	5	13	5	6**	5	7**	5
Extrinsic	38	2	1	35	2	25	2	9
Total	61	7	14	40	8	30	9	14
Misc. Neck Nodes (Primary Undertermined)	5	0	0	5	3	1	0	1
Totals	260	50	95	115	44	161	26	29

*Tracheotomy, tracheostomy, biopsy are not included.
**All surgically treated cases had either local destruction, laryngofissure or laryngectomy.

Collected Data

Table II shows in detail the total number of cases of cancer in each anatomical site. For convenience this table is divided into three parts: (A) the anterior regions of the oral cavity, (B) the posterior portions and the mouth and pharynx, and (C) the larynx. Of the eleven cases in hospi-

TABLE III. OPERATIONS DONE UPON 260 PATIENTS—CANCER MOUTH AND LARYNX, DETROIT, 1946

Site	Total No. Cases	Local Excision	Cautery Excision	Radical Neck Dissection	Local Neck Dissection	Hemi-glossectomy	Total Laryn-gectomy	Laryngo-fissure
Lip, Upper	9	4	0					
Lip, Lower	52	14	1	2	1			
Floor of Mouth	16	3	0	1				u
Tongue	56	9	1	3	2	3		
Buccal Mucous Membrane	5	0	0					
Gums	5	0	0					
Mandible	2	0	0					
Total	145	30	2	6	3	3		
Tonsil and Pillar	16	1	2					
Sinuses	3	2	0					
Nasopharynx	11	1	0					
Pharynx (Hypo)	9	0	0					
Palate	10	1	1					
Total	49	5	3					
Larynx, Intrinsic	23	3	0				3	9
Larynx, Extrinsic	38	0	0				4	0
Total	61	3	0				7	9
Neck Nodes	5	0	0	1	2			

tals under 300 beds, the selection and anatomical distribution is similar to those in the larger institutions: tongue, 4; buccal mucosa, 1; lip, 3; floor of the mouth, 1; tonsil, 1; larynx (extrinsic), 1.

Comments

It can be seen that three anatomical sites, lower lip, tongue, and extrinsic larynx account for more than half the total number of cases (146, or 56 per cent). The total number of posterior mouth and pharyngeal lesions is small.

In general, patients with lower lip cancers are the only ones who come for treatment early. Thirty-two (54 per cent) of sixty-one lip cancers were seen at an early stage. By contrast, of fifty-six tongue cancers only four (7 per cent) were considered early. In the total group of forty-nine posterior mouth lesions only three (6 per cent) were early. Of sixty-one larynx cases only seven (11 per cent) were limited to one vocal cord.

Lip cancer was the only tumor treated by surgery in any great number of patients. Of the sixty-one lip cancers eighteen had surgical excision, four had operation and irradiation, and thirty-five had irradiation alone. Only four of the fifty-six tongue carcinomas were treated by surgical removal alone. Nine had both operation and x-ray.

In group B (posterior mouth lesions) with few exceptions treatment was by irradiation. As noted, these tumors are usually diagnosed in a late stage. By virtue of their anatomical site, they lend themselves to irradiation therapy more readily than to surgery.

Six of twenty-three patients with intrinsic laryngeal cancer had operation performed, either local removal, laryngo-fissure or laryngectomy (tracheotomy is not included) and seven had operation combined with x-ray. Of the thirty-eight patients with extrinsic laryngeal cancer, only two were early. Two had operation only (laryngectomy) and two had operation (laryngectomy) combined with x-ray therapy.

Table III lists the total number of operations done in the entire series. Seven patients had a radical neck dissection. In two the primary tumor originated on the lower lip; in one on the floor of the mouth, and three on the tongue. In one patient the primary lesion was undetermined. Of the sixty-one patients with laryngeal cancer only seven had a laryngectomy (three intrinsic, four extrinsic). Nine patients with intrinsic laryngeal cancer had a laryngo-fissure.

In Table IV an attempt was made to determine whether the decision to treat patients with surgery or with irradiation differed in the eight major hospitals. In the smaller hospitals the numbers were too few for comparison. The sites chosen for study were the lower lip, the tongue, and the larynx (intrinsic and extrinsic). The number of early cases is tabulated for each type. The treatment (surgery, x-ray or both) includes the total number of cases in each category .

In Hospital B, nine patients with lip cancer (Table IV, A) had operation only performed and none had x-ray treatment. In Hospital D, of twenty-two patients none had operation only, one had a com-

bination of operation and x-ray, and twenty-one had x-ray therapy alone. The other institutions treated a total of eighteen cases, of which three had operation only, two both operation and x-ray, and thirteen x-ray only.

have good follow-up systems, but for mouth and larynx cases they were not complete. According to the charts and records examined, there was no institutional follow-up of any other surgically treated oral or larynx cases.

TABLE IV. TYPE OF TREATMENT AT EIGHT MAJOR HOSPITALS

Hosp.	A. Lip, Lower					B. Tongue				
	Total	Early	Treatment			Total	Early	Treatment		
			Surg.	X-ray	Both			Surg.	X-ray	Both
A	2	1	1	1	0	7	0	0	4	0
B	9	1	9	0	0	2	0	0	1	1
C	6	4	0	5	1	7	1	0	5	1
D	22	16	0	21	1	23	2	1	15	6
E	4	0	1	3	0	2	0	1	1	0
F	2	0	1	0	1	3	0	1	2	0
G	1	0	0	1	0	5	0	0	2	1
H	3	2	0	3	0	3	0	0	3	0
Total	49	24	12	34	3	52	3	3	33	9

Hosp.	C. Intrinsic Larynx					D. Extrinsic Larynx				
	Total	Early	Treatment			Total	Early	Treatment		
			Surg.	X-ray	Both			Surg.	X-ray	Both
A	1	0	0	1	0	9	0	0	8	0
B	5	1	3	1	1	0	0	0	0	0
C	3	1	0	1	0	2	0	0	2	0
D	4	3	2	1	0	13	2	1	8	2
E	1	0	0	0	0	0	0	0	0	0
F	3	0	1	1	1	0	0	0	0	0
G	0	0	0	0	0	8	0	0	5	0
H	6	0	1	0	5	5	0	1	3	0
Total	23	5	7	5	7	37	2	2	26	2

Hospital B was the only institution where, according to these figures, the surgical removal of lip cancer was popular.

In Hospital D (Table IV, B), of the twenty-three patients with cancer of the tongue one had a surgical excision and six had surgical excision combined with x-ray therapy. In the remainder of the fifty-two patients two more had surgical excision alone and three had combined surgical and x-ray treatment.

In laryngeal cancer (Table IV, C), the individual cases distributed in each hospital are too few to draw comparisons. All it indicates is how widely these cases are scattered, with no one institution caring for any large number of them, especially when it comes to surgical care.

Follow-up Records

As near as could be determined, one county hospital which had a large number of carcinoma cases, many of them in far advanced stages, has an excellent follow-up system. One private hospital, a closed staff clinic, has a follow-up system which includes all cases of cancer in all body sites treated in the hospital. Some of the x-ray therapy services

Conclusions

1. A survey was made of cancer of the mouth, pharynx, and larynx treated in Detroit in one year, 1946.

2. There was a total of 260 cases; all but eleven were treated in eight large hospitals which have capacities of 300 to 500 beds. The total beds in these eight institutions represents one-half of that for the entire community.

3. Carcinoma of the lower lip was the only cancer which was treated in an early stage (1.5 centimeters or less) in any large number.

4. Treatment of the entire group, in general, was by irradiation therapy. Except for the surgical treatment of lip cancer in one institution few operations were performed on the entire group of patients.

5. In this group, with the exceptions noted, follow-up was insufficient.

MSMS

Osseous metastases occur in one-half of all cases of prostatic cancer; in one-fourth of all cases of renal cell carcinomas and hypernephromas arising in the cortex of the kidney; in one-fourth to one-half of all cases of thyroid carcinoma; and in one-fifth of all cases of mammary carcinoma.

Detroit Physiological Society

Meeting of January 19, 1950

The Effect of Added Dietary Tryptophane on the Occurrence of Diethylstilbestrol-Induced Mammary Cancer in Rats

W. F. Dunning, M. R. Curtis and M. E. Maun
Detroit Institute of Cancer Research, Department of Pathology, Wayne University College of Medicine, and Deaconess Hospital, Detroit 1, Michigan

Three groups of A x C Line 9935 female rats with diethylstilbestrol pellets implanted in their scapular region, were placed on iso-caloric synthetic diets containing 26 per cent protein. The first group of twelve received the diet with 26 per cent casein, the second group of twelve received the same diet, substituting 24.6 per cent tryptophane-free casein hydrolysate and 1.4 per cent d-1 tryptophane for the casein, and the third group of fifteen received in place of the casein, 21.7 per cent tryptophane-free casein hydrolysate, plus 4.3 per cent d-1 tryptophane.

All thirty-nine rats lived more than 160 days, the minimum period before the occurrence of an induced mammary cancer, and thirty-two or 82 per cent developed multiple mammary cancers. Of the control group, nine or 75 per cent developed fifty-one gross cancers in an average of 363± 8.6 days; while 100 per cent of those which received 1.4 per cent d-1 tryptophane developed seventy-nine mammary cancers in an average of 316± 5.7 days, and nine or 60 per cent of the rats that received the high-tryptophane diet developed only thirty-one gross mammary cancers in an average of 399± 7.5 days.

The addition of 1.4 per cent of d-1 tryptophane increased the number and percentage of induced cancers and significantly reduced the average latent period below that observed for the control group. The greater increase in dietary tryptophane produced the reverse effect of a decreased number and percentage of induced cancers and a significantly prolonged latent period.

Current Studies on Rheumatoid Arthritis from the Standpoint of a Possible Virus Etiology

Cyril S. Stulberg and Dorothy B. Darling
Virus Laboratory, Children's Fund of Michigan, Detroit

Reports have shown that suspensions of particles resembling viruses were obtained from exudates of rheumatic patients and that these particles were specifically agglutinated by sera of patients with rheumatic disease. However, repeated efforts to establish an infectious etiological agent in rheumatic diseases have led to unsuccessful or equivocal results. As a phase of our combined biochemical and immunological studies on rheumatoid arthritis, some of the possible virus aspects of the disease were investigated.

In the present series, muscle biopsies and sera were collected from ten patients with active rheumatoid arthritis. Attempts to isolate a viral agent were almost wholly confined to muscle as the source material, since it has been reported that nodular inflammatory lesions occur in skeletal muscles in rheumatoid arthritis. Therefore, it seemed possible that an infectious agent might be found in areas exhibiting lesions. A suspension of muscle tissue was inoculated into chick embryos, six, eight and ten days of age by injection into the allantoic or yolk sac, or on the chorio-allantoic membrane. At least five subpassages were made by each route employing different incubation periods. None of the embryos developed significant lesions as evidence of infection. Attempts to demonstrate infection by chemical changes in the egg fluids also yielded negative results. No evidence of transmission of an antigenic agent detectable by complement fixation tests was obtained. Sera collected from these patients did not exhibit the presence of antibodies specific for several viral agents including those of influenza, mumps, and lymphocytic choriomeningitis, or for rickettsial agents including those of epidemic and murine typhus, and Q fever.

Ultrastructure of the Red Cell and Its Electron Microscopy

J. W. Rebuck
Henry Ford Hospital.

Actual visualization of the protein cytoskeleton of the defatted erythrocyte ghost by Wolpers has lead to changes in the classic concept of the surface ultrastructure. Application of this concept makes possible an explanation of the sunburst effect produced upon the erythrocytic periphery by exposure to hemolysins in acquired hemolytic anemia. The breadth of the area of the surface ultrastructure reacting with the antibody corresponds in magnitude to the breadth of one or two of Wolper's fibrillar protein strands and falls well within the limits of the reacting areas in Pauling's three-dimensional visualization of antibody-antigen union. Among the forces to which maintenance of the biconcave disc form is attributed, least studied is the possibility of preferential arrangement of the erythrocytic interior, perhaps the hemoglobin molecules themselves, so that the forces between the interior molecules may be greater in one direction. Electron micrographs of the earliest stages in sickling may well throw light upon these forces. The early stages of anoxia in sickle cell trait and sickle cell anemia cells present evidences of incipient crystallization, much more marked in the latter cell types. Electron micrographs of the filaments of fully sickled cells afford opportunity for study of hemoglobin-membrane relationships, measurement of surface-ultrastructure thickness as well as the mechanisms of the sickling process itself. Rouleaux formations of otherwise normal erythrocytes occasionally present micrographs of hemoglobin shrinkage away from the surface ultrastructure permitting direct measurement of the thickness of the surface ultrastructure.

THE GOLDEN YEARS

Out of every 100 men and women over 65—

34 are still working for a living

22 are dependent on public assistance

17 are cared for by relatives, friends or private charities

13 live on savings

11 are supported by social security and other public retirement plans

3 receive their chief support from private retirement systems

—From a report to Congress on "Issues in Social Security."

EXFOLIATIVE CYTOLOGY IN PERIODICAL PHYSICAL EXAMINATION

(Continued from Page 321)

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CANCER IN THE JEWISH RACE

(Continued from Page 334)

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The proposals for socialized medicine now before Congress seek the nationalization of American medicine down to the last bottle of aspirin, with Washington in complete direction and control of every hospital, every medical school, every research laboratory, every physician, every dentist, every nurse, and every hospital technician in the land.—L. C. Arends, M.C., Illinois.

Medical Ethics

So long as the primary responsibility of the physician is to his patient and his own conscience, medical ethics will continue to be an important topic. Although it is impossible even to mention all facets in a brief note of this sort, an objective commentary on medical problems can hardly avoid some phase of the subject.

Perhaps most difficult among the major ethical problems facing every doctor today is his economic relationship to the patient. In this era of high demand for medical service and low doctor-per-capita ratio, commercialization of medical practice is absurdly easy and undoubtedly tempting to certain individuals. It speaks well of general medical ethics that actual instances are relatively few. After at least eleven years of expensive full-time education, great responsibility, and uncertain, arduous business hours, every doctor is entitled to a comfortable living for himself and family. But, unfortunately or otherwise, medical practice is still sufficiently a humanitarian service that the doctor is entitled to nothing more. And a present probability exists that public opinion may someday find opportunity to penalize the many for the overreaching of the few.

A second problem concerns dissemination of professional problems and attitudes to the public. At first impression it might seem that the doctor has too important a task in medical service to lend his amateur efforts to public education. But unfortunately large segments of the public are at once misinformed and uninformed concerning the function of the doctor in modern society. Within the medical profession alone is the experience and understanding requisite to adequate re-education. An "ivory tower" attitude is just not in accord with the necessities of modern medical practice.

One major problem, however, is noteworthy for the considerable present progress toward its solution. This problem involves the continual personal re-education required if the doctor is to "keep current" with constant additions to medical knowledge. The success of such programs as the recent Michigan Postgraduate Institute attests that the average doctor is squarely facing this problem. We believe our profession capable of meeting all other problems as well.

W. E. Barstow M.D.

President, Michigan State Medical Society

President's

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POSTGRADUATE CONTINUATION COURSES

Wayne University College of Medicine

March 13-June 10, 1950

These courses are open to all qualified persons.

Veterans who are not Residents in a Detroit hospital and who have Certificates of Eligibility under the G.I. Bill, should make arrangements for tuition and books, as provided by the G.I. Bill, by presenting these Certificates of Eligibility to Mr. Arthur Johnson, Veterans Administrator at Wayne University, 5001 Second.

If you do not possess a Certificate of Eligibility, please call Mr. Johnson at Temple 1-1450, Veterans Affairs, before going to his office, and he will inform you what papers it is necessary to bring with you. *This must be completed before you register.*

Registration for these courses can be made in the office of Postgraduate Medical Education at the College of Medicine, 1512 St. Antoine, *before March 11.*

Title of Course	*Place*	*Time*	*Fee*
	Anatomy		
Surgical Anatomy (Second half)	College of Medicine	Tuesday 3-5	$35.00
Regional Anatomy			
Trunk	College of Medicine	Wednesday 1-5	$50.00
Back & Extremities	College of Medicine	Thursday 1-5	$50.00
Head and Neck	College of Medicine	Friday 1-5	$50.00
	Bacteriology		
Parasitology	College of Medicine	Friday 1-4	$35.00
	Pathology		
Gynecologic Pathology (Limit 50)	College of Medicine	Wednesday 1-5	$50.00
Advanced Hematology (Limit 5)	College of Medicine	Monday 1-5	$50.00
	Physiological Chemistry		
Seminar in P. Chemistry	College of Medicine	Thursday 3:30-4:30	$15.00
Physical Biochemistry	College of Medicine	Weds. & Fri. 2-3	$25.00
Nutrition	College of Medicine	M. W. F. 11-12	$35.00
Quantitative Methods & Metabolism	College of Medicine	M. W. F. 8-12	$75.00
	Dermatology		
Seminar in Dermatology	Receiving Hospital	Wed. 10-11:30	$15.00
Seminar in Dermopathology	College of Medicine	Tuesday 11-12	$15.00
Conference on Venereal Diseases	Social Hygiene Clinic	Thursday 1-2:30	$15.00
Deep Mycoses	Receiving Hospital (4th fl., Mycology Lab.)	Thursday 10:30-12	$30.00
	Internal Medicine		
Medical Seminar	Receiving Hospital	Thursday 6:30-7:30	$15.00
Medical Conference	Receiving Hospital	Saturday 11-12:30	$15.00
Gastroenterology (Limit 10)	Receiving Hospital	Saturday 8-9	$15.00
Medical X-Ray Conference (Limit 10)	Receiving Hospital	Tuesday 11-12	$15.00
	Surgery		
Surgery Seminar (Limit 20)	College of Medicine	Monday 4-5	$15.00

Editorial

THE REAL ISSUE IS SOCIALISM

THE JANUARY and February issues of some of our national magazines, and also our medical press have articles and editorials on that subject stressing the fact that we are facing a real national problem of socialism, rather than just the socialism of medicine. They especially carry the good news that others are now joining with the medical profession in an effort to retain for the American people the status of individualism. We are happy that other editors are inviting the attention of their readers to the real issue.

The socialism issue was recognized by the JOURNAL of the MICHIGAN STATE MEDICAL SOCIETY long ago when we said editorially (and in italics) in October, 1943, page 826, "Other nations have gone through this socialization of their governmental structure and have found the most effective method of accomplishing that end has been through medical service to the people. History shows it has always been the first step to general socialism." Michigan has been opposing the socialism scheme on many occasions since "the rising tide of threats against the freedom of American principle is spearheaded by proposals for governmental health insurance." (JMSMS, February, 1946, page 216.)

The number of those who recognize the course and implications of the policies our government is following is increasing rapidly. This possibly accounts for the continued and spreading propaganda for the social state, or welfare state. Can it be that the bureaucrats and social planners foresee that their cause is actually losing among the progressive and substantial people of the country, and are making a desperate effort? Special interest groups are beginning to appreciate that the problem today is not socialism of agriculture, utilities, medicine, or any one single field.

One-third of our national production and income has been socialized by taxation, one-third by bureaucratic orders, licenses, price fixing subsidies and outright controls. Less than one-third of our economy is free. We have already gone too far, and the job before us is staggering, but let's get going.

The real issue is Socialism.

A DEFINITE THREAT

OUR MOST dangerous enemy is the bureaucrat or do-gooder who assumes the role of leader, who denies that he is a socialist, and who works behind a smoke screen which he calls National Planning. The social planners have already taken us far down the road which has been the pathway of so many European nations to their regret. Unless we can recognize these individuals for what they are, and can stop them, they will also destroy this country. Their present offering is "security" for the individual or group, but a security which involves too much control, too much surrender of liberty.

John T. Flynn in his latest best-seller, "The Road Ahead" tells of the two great European countries which have become socialist. "Each adopted socialism by a different route. . . . Russia was conquered overnight by a sudden, violent, revolutionary convulsion. Great Britain moved into socialism a little at a time, without bloodshed, in a journey that took almost forty years." We are following Great Britain, and we are much farther along the road than we suspect. They began by advocating a Welfare State.

The British Socialist Prophets of Abundance and Security (the same as ours) have been in power four years and it is finally dawning on the British people that the realities do not correspond to the rosy promises. Britain has "nationalized" about 25 per cent of her economic processes, but she has "socialized" almost the entire system. The government has nationalized the following: The Bank of England (credit); cables and wireless (the overseas communications system); civil aviation; railways, bus transport and inland waterways; coal mines; electricity; the gas industry; medical services.

This socialistic system is able to go on only because it receives untold billions in aid from private enterprise America. The socialists' great hold on the people is because of the social service they promise the people, and which they provide from the cradle to the grave. These services include all medical services, hospital services, old age retirement payments, unemployment pay and allowances for widows and orphans.

Men between the ages of eighteen and fifty, and women between the ages of eighteen and forty cannot change occupations at will, for the Minister of Labor has the power to direct workers to the employment he considers for the best national interest. That power is essential in the controlled economy of the Welfare State.

America is now threatened with this same type of socialism, and just as it fastened itself on Great Britain by a devious movement not called socialism, so it is being fostered in America by persons and organizations who abhor the word "socialism."

THE BRITISH PICTURE—NOT FOR US

SOCIALIZED MEDICINE as it is now working in Great Britain is described in three articles now appearing in *Reader's Digest*. Harold E. Stassen, President of the University of Pennsylvania and former Governor of Minnesota, tells of his findings on a trip to England and Europe to study the compulsory health system. His article "Never! Never! Never!" is in the January, 1950, number. In February appears "Granny is Gone," and a third will appear in March. Mr. Stassen says the breakdown of hospital and medical care for the aged is probably the principal cause for the startling increase in Britain's death rate for the first quarter of 1949—a rise from 123 to 150 per 10,000 over the corresponding quarter of 1948 before the compulsory system became general.

The hospitals are swamped. They are crowded, with over 200,000 on the waiting list, and 50,000 beds idle because of shortage of nurses and other personnel under government operation. The total amount of surgery is actually decreased in spite of the government paying the bill. Emergency cases cannot get into the hospitals, so it is not surprising that others needing corrective surgery, or attention that is not urgent but is important to good health, are not cared for.

Mr. Stassen tells of his conversation with a good surgeon who in his younger days "traded work" with a man whose wife needed obstetric services, but who not having any money built and painted a fence in exchange for his wife's care. That man became a great friend of his doctor, and being an independent individual made his success in the industrial world. Could that happen now? The doctor told Mr. Stassen "what makes me uneasy is whether self-reliance and leadership will continue when personal responsibilities are reduced—when the state takes a man's earnings and spends the money doing things for him."

No one can measure the effects on character. They are intangible and indirect, but already there are signs of an unfortunate effect upon the British medical profession itself. Since 1948 there has occurred a slight decrease in the number of young men studying medicine, and this at a time when the need is even greater. Some of the more ambitious practitioners are making plans to leave the country. Some have gone.

Mr. Stassen tells of restrictions in the matter of selecting a place to practice. A young man may select a place, but he must be approved by the others in the locality. The earnings are restricted by the provisions of control, and the regulations of the ministry. There are also restrictions which would severely limit the independence of judgment which has characterized the profession through the generations. One London doctor told Mr. Stassen, "I believe this system is here to stay; I therefore have nothing whatever to say for it or against it."

Every doctor should read these articles by Mr. Stassen. He will be edified, but also filled with anxiety for what might be.

GOOD PUBLICITY

IN TWO SUCCEEDING numbers *Collier's* magazine has published remarkable articles which every doctor of medicine should read. "Mr. Welfare State Himself," "Washington's best hated bureaucrat since Harry Hopkins has ambitious plans for himself and the U.S.A." This article gives the alpha and omega of Oscar Ewing. It tells how Ewing set about to gain control of government through certain associations and activities. It tells of his Round Table, or Privy Council. It tells of his using in his own office a $3,225-a-year chief cook from St. Elizabeth's Hospital. It tells of Ewing's summary ousting of Dr. Thomas Parran, as Surgeon General of the U. S. Public Health Service. The Ewing, McNutt, Wilkie group of former classmates met disaster when Ewing changed political affiliations for personal advancement.

This article appeared in the February 4, 1950, number of *Collier's*. Mr. Ewing's political aspirations, ambitions, and the extent to which he will sacrifice friends and principles to accomplish that ambition are well told. "The Senate has decided that there's a suspicious character at large in

Washington, a bureaucratic dictator, a brass-lunged advance agent of the galloping Welfare State."

The second article, "The Doctor Brushed Off Utopia," February 11, 1950, is about a British doctor who is now interning to get into practice in the United States. Ralph Jocelyn Gambell, M.D., left his practice in England because of the socializing handicaps of free practice. He spoke to a group at the AMA meeting in Atlantic City in June, 1949, and at various other places. This article tells his story well and dramatically. *Collier's,* by these two articles, is rendering a great aid to the fight against socialism.

GENERAL PRACTICE

THE PRE-PUBLICATION special issue of *General Practice* published by the American Academy of General Practice foretells a very promising addition to the field of medical journalism.

There are 128 pages and cover, printed on heavy gloss paper. It contains five good original articles. An editorial department precedes the papers. A very interesting Secretary's newsletter, typewritten with a vari-typer, is tipped in, in color. A page of notes on this month's authors; a page of letters from readers; a section on current journal reviews; a question-and-answer section called "Information Please"; Therapeutic conferences; an ambitious section on Business and Economics; a page on government medicine in the light of Hoover Commission; report by J. S. DeTar, M.D., of Milan, Michigan; the book review department; Academy reports and chapter news; postgraduate courses and coming meetings, and a section "After Hours," in which hobbies are stressed.

There is listed an Advisory and Consultant Board which contains a number of Michigan names: George Waldbott, M.D., Detroit, Allergy; Cyrus C. Sturgis, M.D., Ann Arbor, Hematology; Frederick A. Coller, M.D., Ann Arbor, General Surgery; William M. Tuttle, M.D., Detroit, Thoracic Surgery; James L. Wilson, M.D., Ann Arbor, Pediatrics; Clarence D. Selby, M.D., Detroit-Ann Arbor, Industrial Medicine; D. E. Waggoner, Ph.D., Ann Arbor, Preventive Medicine, Public Health and Statistics; Reuben K. Kahn, Ph.D., Ann Arbor, Laboratory Medicine.

We are happy to welcome this Journal. We know it will have an impressive influence in welding together and strengthening the Academy of General Practice. We congratulate the retiring President, E. C. Texter, M.D., of Detroit, on the accomplishment of his presidential year.

AMA DUES AND THE PUBLIC

ON ACCOUNT of the action of the American Medical Association at the Interim Session at Washington, D. C., in December in establishing dues for the members to pay, the Association has been held up to ridicule by our detractors and the propagandists who are promoting socialization of the country. Therefore, it is a real pleasure to find someone with vision and understanding.

Mr. Joseph Christensen, of the Progressive Cafeterias of Chicago, recently wrote as follows to Earnest E. Irons, M.D., President of the American Medical Society: "I cannot put M.D. after my name, but I can, at least for a while, still put U.S.A. As a consequence please accept the enclosed check for $25.00 as a slight token of regard for my doctor and all his colleagues. These are my "dues" as a citizen, and I hope they will help in your fight against socialized medicine. "A people without guts are soon a nation without guts, and if it should become necessary to remove any part of mine, I want to pick my man and pay his charge without a precinct captain getting his nose in my anatomy."

PERTINENT CANCER PROBLEMS

THERE HAS been no abatement of the public interest in cancer during the past year. In some respects, public interest has heightened—especially in the desire for periodic examination of apparently healthy persons to detect cancer in early and curable stages.

An increasing number of state and local medical organizations are developing plans for making every physician's office a cancer detection center. The most notable of these plans—The Hillsdale Plan for Tumor Detection—is serving as the model for such programs throughout the nation.

The major responsibility for the success of any of these undertakings rests on the medical profession. Cancer is encountered in all fields of medical practice; therefore all physicians are concerned. Cancer in younger age periods is assuming greater importance so its occurrence at any age cannot be overlooked. Assumptions that "it can't be cancer" because of age or other factors are entirely unwar-

ranted and misleading and may have disastrous consequences.

Education remains one of the most potent forces for the control of cancer. It should stand on equal footing with early diagnosis and treatment as a control measure. It should be a never-ending process. As new generations mature, some of whose members carry a false and fantastic mental picture of cancer, education becomes essential for the development of sensible attitudes toward this problem. Much of the increase in lives saved in recent years has been due to the active and continuing lay and professional education programs.

Emphasis on service to the cancer patient, despite its great humanitarian appeal to many people, does little or nothing to advance the control of cancer. Much of the money now devoted to this phase of the cancer problem would provide far greater returns in lives saved if spent on constructive educational projects, especially in the high school age group. Education saves lives. Service to the patient with cancer simply makes his remaining days as comfortable as possible. Early diagnosis continues to offer the greatest hope for the control of cancer.

The research program, financed in large measure by American Cancer Society funds, extends into many scientific fields. With increasing frequency, new diagnostic and treatment methods are reported in the public press. Some of these reports are based on a minimum of data and indicate prematurity of conclusion and lack of the adequate controls necessary for proper evaluation. Such reports often raise false hopes in the public mind, and especially in the minds of cancer patients and their families. To this extent, their contribution to the solution of the cancer problem is of doubtful value. There is a considerable amount of optimism to be derived from the application of scientifically accepted information about the diagnosis and treatment of cancer. Doubt regarding the value of accepted methods of therapy should not be encouraged by the premature publicity about new methods which must have more extensive trial before their real value can be determined.

The best service that can be rendered at this time toward the control of cancer in any community is to realize that any patient, regardless of age, can have cancer; that many cancers are found by alertness on the physician's part; that early diagnosis offers the greatest chance for cure; and that education is the most constructive force that can be applied in any community for an ultimate reduction in the number of lives lost from this disease.

THE BATTLE

Doctors are busy people. In New Zealand, Australia, and Great Britain they were too busy to be cohesive. They were oblivious to the ancient technic of Fabius, as were most of the other citizen-taxpayers. Result: Nationalization of essential services, among them medicine and its institutions.

It can happen here. We can have the Poorhouse State here, too. Since medicine is the principal point of attack, doctors will be wise to scrutinize the daily press and magazine articles appearing for the public, which are openly or overtly critical of medicine. We do not infer that medicine is beyond legitimate criticism; on the contrary, constructive criticism, based on provable facts, is to be welcomed. But there is a point, difficult to define exactly, where criticism becomes attack. Careful chronologic examination of pertinent data before and since 1930 will disclose the changing character of the stridor and the progressive increase in volume. In more recent years public hearings, for example on the various Federal bills calling for national compulsory health insurance, have provided a sounding board for the aggressor to organize the forces of discontent, to convert the impact of what might have been useful and constructive criticism of medicine and doctors for the public benefit into a subtle type of guerilla warfare, directed now here now there, a show of force following the revolutionary technic well understood in the socialist Poorhouse States of Europe. So scattered have the assaults been upon a busy profession as in many instances to escape notice!

If the forces of aggression press battle upon the medical profession they will get it, even upon the unequal terms of the millions which the profession can raise by taxing themselves as against the billions that can be marshalled against our campaign of public education by general taxation of the public, the poor, the working man and woman, the doctor, the lawyer, the employed veteran, the businessman, the corporation, the civil servant, the members of the armed forces, the vanishing rich, and the chimerical "selfish interests."—Excerpts from Editorial, *New York State Journal of Medicine,* Feb. 15, 1950.

Annual Session of The Council

January 20-21, 1950

HIGHLIGHTS OF THE COUNCIL

- Auditors' (Ernst & Ernst) report for 1949, and budgets for 1950 approved (see pages 358-362).
- Annual Reports of Secretary, Treasurer, Editor, and three Standing Committees of The Council accepted.
- Secretary L. Fernald Foster, M.D., Treasurer A. S. Brunk, M.D., and Editor Wilfrid Haughey, M.D., re-elected.
- Progress report on Michigan Medical Service by R. L. Novy, M.D., Detroit.
- Official report of MSMS Delegates to the American Medical Association—on Washington, D. C., mid-winter session—accepted.
- Progress report on Michigan Health Council presented by MHC President A. S. Brunk, M.D.
- Report on 1949 Michigan Rural Health Conference presented by E. I. Carr, M.D., who advised that the 1950 Michigan Rural Health Conference would again be sponsored financially by the Michigan Foundation for Medical and Health Education, Inc. (of which Dr. Carr is President).
- Committee reports were presented by the Permanent Conference Committee, Liaison Committee with Michigan Hospital Association, Special Committee on Education, Committee on Increase of Number of Graduates from Medical Schools, Committee on Medical Socio-Economic Courses in Michigan's Medical Schools, Commission on Healing Arts, Venereal Disease Control Committee, Postgraduate Medical Education Committee, Committee to Study Health Plans, Preventive Medicine Committee, Rural Medical Service Committee, Mental Hygiene Committee.
- Monthly reports of President W. E. Barstow, M.D., President Elect C. E. Umphrey, M.D., Secretary L. Fernald Foster, M.D., Legal Counsel J. Joseph Herbert, and Public Relations Counsel H. W. Brenneman accepted.
- Report on voluntary health organizations in Michigan was presented by Carleton Dean, M.D., of the MCCC.
- Monthly report of Rheumatic Fever Program Co-ordinator Leon DeVel, M.D., was presented and accepted.
- Annual Progress Reports of individual Councilors on condition of profession in each District were presented.

SECRETARY'S ANNUAL REPORT—1949

To The Council of the MSMS:

I herewith submit the report of the Secretary for the year 1949.

Membership

The Michigan State Medical Society membership for 1949 showed a total of 4,971 members, including 188 Emeritus and Life members, 13 Retired members and 67 Associate members. The total paid membership was 4,789 with net dues of $48,867.00. The 1949 membership was at the highest peak in the history of the society. The number of members with unpaid dues for 1949 was 137.

Deaths During 1949

We regretfully record the deaths of the following eighty-six members during 1949:

Barry—Kenneth S. McIntyre, M.D., Hastings.
Bay-Arenac-Iosco—John A. Keho, M.D., Bay City.
Berrien—Frank K. Belsley, M.D., Benton Harbor.
Calhoun—Bertha Loveland Selmon, M.D., Battle Creek; Franklin R. Walters, M.D., Battle Creek.
Genesee—Harry A. Jefferson, M.D., Flint.
Gratiot-Isabella-Clare—Thomas J. Carney, M.D., Alma.
Hillsdale—Burt F. Green, M.D., Hillsdale.
Houghton-Baraga-Keeweenaw—D. K. MacQueen, M.D., Laurium, and A. C. Roche, M.D., Calumet.
Ingham—Harold A. Miller, M.D., Lansing; Gertrude O'Sullivan, M.D., Mason; Thomas M. Sanford, M.D., Lansing; Lillian R. Smith, M.D., Lansing.
Jackson—Harold Lee Hurley, M.D., Jackson, and William W. Lathrop, M.D., Jackson.
Kalamazoo—Leslie H. S. DeWitt, M.D., Kalamazoo; Byron Farwell, M.D., Kalamazoo; Albert E. Henwood, M.D., Kalamazoo; Roscoe F. Snyder, M.D., Kalamazoo.
Kent—Corda Earl Beeman, M.D., Grand Rapids; Theron W. Hammond, M.D., Grand Rapids; Henry Hulst, M.D., Grand Rapids; Thomas R. Kemmer, M.D., Grand Rapids; Pius L. Thompson, M.D., Grand Rapids.
Lapeer—H. M. Best, M.D., Lapeer.
Lenawee—F. J. McCue, M.D., Adrian; Leo J. Stafford, M.D., Adrian.
Manistee—Henry M. Quinn, M.D., Copemish.
Marquette-Alger—Jacob Talso, M.D., Ishpeming.

Mason—Victor J. Blanchette, M.D., Scottville; Ivan L. Hunt, M.D., Scottville.

Muskegon—Clement Francis Derezinski, M.D., Muskegon; A. F. Harrington, M.D., Muskegon; Fred N. Morford, M.D., Muskegon; Antoine S. Petkus, M.D., Muskegon.

North Central Counties—George Adam Drescher, M.D., Lewiston.

Northern Michigan—F. H. Lashmet, M.D., Petoskey.

Oakland—Kenneth E. Blair, M.D., Pontiac; Martha S. Cottrell, M.D., Novi.

Oceana—Norman W. Heysett, M.D., Hart, Michigan.

Ontonagon—Edwin J. Evans, M.D., Ontonagon.

Saginaw—David E. Bagshaw, M.D., Saginaw.

St. Clair—James Arthur Attridge, M.D., Port Huron; Jacob H. Burley, M.D., Port Huron; Thomas E. DeGurse, M.D., Marine City; George Waters, M.D., Port Huron.

Shiawassee—H. A. Hume, M.D., Owosso.

Washtenaw—Harry B. Britton, M.D., Ypsilanti; Max M. Peet, M.D., Ann Arbor; August Karl Zinn, M.D., Ypsilanti.

Wayne—Philip R. Appel, M.D., Detroit; Arthur F. Boell, M.D., Grosse Pointe Park; Russell G. Brando, M.D., Detroit; Jacob H. Chalat, M.D., Detroit; Howard R. Coll, M.D., Highland Park; Walter J. Cree, M.D., Detroit; Hampton P. Cushman, M.D., Detroit; Arthur P. Derby, M.D., Detroit; Bruce Douglas, M.D., Detroit; Alex V. Forrester, M.D., Detroit; Eldred E. Fraser, M.D., Detroit; Joseph D. Goldsmith, M.D., Detroit; Thomas K. Gruber, M.D., Eloise; Joseph A. Haluska, M.D., Detroit; Albert A. Hughes, M.D., Detroit; Stanley W. Insley, M.D., Detroit; Richard A. James, M.D., Detroit; Armand Kersten, M.D., Detroit; Paul H. Lippold, M.D., Detroit; Archibald D. McAlpine, M.D., Detroit; Crawford W. McCormick, M.D., Detroit; Morey D. Miro, M.D., Detroit; Oscar Nagel, M.D., Detroit; Arthur J. Neumann, M.D., Detroit; James T. O'Hora, M.D., Detroit; Edward J. Panzner, M.D., Detroit; George L. Renaud, M.D., Detroit; William F. Shannon, M.D., Detroit; Robert G. Shaw, M.D., Detroit; Harold K. Shawan, M.D., Detroit; J. Walter Vaughan, M.D., Detroit; Adolph E. Voegelin, M.D., Detroit; Dudley B. Waltz, M.D., Detroit; Norman L. Woodry, M.D., Detroit.

Wexford—Edwin A. McManus, M.D., Mesick.

County Medical Society	PAID		SPECIAL MEMBER				DEATHS		NET MEMBERSHIP Close		1949		UNPAID	
	1948	1949	Emer.	Life	Retd.	Assoc. Military	1948	1949	1948	1949	Gain	Loss	1948	1949
Allegan	24	20	—	3	—	—	—	—	24	23	—	1	1	—
Alpena-Alcona-Presque Isle	19	21	—	1	—	—	2	—	19	22	3	—	—	—
Barry	12	11	—	2	—	—	—	1	15	12	—	3	—	—
Bay, Arenac, Iosco	63	69	3	5	1	—	2	1	73	77	4	—	1	1
Berrien	69	74	2	—	—	—	1	1	69	75	6	—	2	2
Branch	20	19	—	1	—	—	—	—	20	20	—	—	—	—
Calhoun	98	101	—	5	1	4	2	2	118	109	—	9	2	7
Cass	11	10	—	—	—	—	1	—	11	10	—	1	—	1
Chippewa-Mackinac	23	23	1	—	—	—	1	—	24	24	—	—	—	1
Clinton	10	16	—	—	—	—	1	—	10	16	6	—	1	—
Delta-Schoolcraft	26	22	2	—	—	—	—	—	27	24	—	3	—	3
Dickinson-Iron	18	18	—	—	—	—	—	—	18	18	—	—	—	1
Eaton	15	16	—	—	—	—	1	—	15	16	1	—	1	—
Genesee	187	187	3	11	1	—	3	1	199	201	2	—	2	2
Gogebic	19	19	—	—	—	—	1	—	19	19	—	—	—	—
Gd. Traverse-Leelanau-Benzie	48	46	—	1	—	—	2	—	49	47	—	2	1	2
Gratiot-Isabella-Clare	39	39	2	—	—	—	1	1	41	40	—	1	—	3
Hillsdale	19	19	—	2	—	—	—	1	22	20	—	2	—	2
Houghton-Baraga-Keeweenaw	28	28	3	2	—	—	1	2	33	31	—	2	1	—
Huron	13	15	—	1	—	—	1	—	14	16	2	—	2	1
Ingham	154	172	1	2	3	—	1	4	162	174	12	—	3	—
Ionia-Montcalm	33	36	—	3	—	—	3	—	37	39	2	—	1	—
Jackson	101	102	3	4	—	1	2	2	111	108	—	3	—	—
Kalamazoo	114	136	3	7	1	—	3	4	126	143	17	—	—	—
Kent	267	281	5	12	1	5	3	5	292	299	7	—	7	3
Lapeer	13	13	3	—	—	—	1	1	16	15	—	1	—	1
Lenawee	44	41	2	2	—	—	2	2	45	43	—	2	—	1
Livingston	17	18	—	—	—	—	—	—	18	18	—	—	—	2
Luce	6	6	1	—	—	—	—	—	6	7	1	—	2	—
Macomb	45	48	—	1	—	—	1	—	46	49	3	—	—	—
Manistee	13	13	1	—	—	—	1	1	14	13	—	1	—	1
Marquette-Alger	38	42	—	2	—	—	—	1	41	43	2	—	4	—
Mason	13	12	—	—	—	—	—	2	13	10	—	3	—	—
Mecosta-Osceola-Lake	14	15	1	1	—	—	1	—	15	17	2	—	—	—
Menominee	13	17	1	—	—	—	—	—	15	18	3	—	1	—
Midland	19	21	—	—	—	—	—	—	19	21	2	—	1	—
Monroe	32	37	2	—	—	—	—	—	33	39	6	—	1	—
Muskegon	84	94	1	—	—	2	—	4	87	93	6	—	—	3
Newaygo	10	10	—	—	—	—	—	—	10	10	—	—	—	—
North Central Counties	15	20	—	—	1	—	—	1	15	20	5	—	—	—
Northern Michigan	30	32	1	—	—	—	3	1	31	32	1	—	4	1
Oakland	166	184	1	3	1	—	3	2	168	187	19	—	4	3
Oceana	7	8	2	—	1	—	—	1	10	10	—	—	—	—
Ontonagon	4	6	—	—	—	—	—	1	4	5	1	—	—	—
Ottawa	34	34	1	2	—	1	—	—	36	38	2	—	—	—
Saginaw	106	109	3	5	1	—	—	1	115	117	2	—	1	3
St. Clair	55	55	—	—	—	—	1	4	57	51	—	6	2	1
St. Joseph	27	25	—	—	—	—	—	—	27	25	—	2	—	—
Sanilac	14	12	—	—	—	—	—	—	14	12	—	2	—	—
Shiawassee	25	21	1	—	—	—	—	1	26	21	—	5	—	2
Tuscola	21	22	1	—	—	—	1	—	22	23	1	—	—	—
Van Buren	21	21	4	—	—	—	—	—	25	25	—	—	—	—
Washtenaw	187	174	1	3	—	51	3	3	262	226	—	36	5	23
Wayne	2,139	2,157	20	32	1	3	23	34	2,201	1,179	—	22	35	67
Wexford-Missaukee	21	22	—	—	—	—	1	1	21	21	—	—	—	—
TOTALS	4,663	4,789	75	113	13	67	73	86	4,960	4,971	118	107	86	137

Journal

The following information relative to the finances of THE JOURNAL is found in the annual audit report of Ernst and Ernst:

Income was $58,217.57 which is $8,717.57 over the tentative budget for 1949.

Expenses were $52,222.43 which were $2,722.43 over the budgetary estimate.

This indicates a net JOURNAL income of $5,995.14.

THE JOURNAL of the Michigan State Medical Society has been published each month under the direction of the Publication Committee of the Michigan State Medical Society. THE JOURNAL has continued to follow the policy, not only of presenting outstanding scientific papers and especially the papers presented at both the Annual Session in September and the Michigan Postgraduate Clinical Institute in March but many manuscripts presented at local societies and others of advanced scientific attainment.

THE JOURNAL has published material to keep the membership informed concerning the socio-economic problems of medicine. It has opposed the program for national socialism which is taking principal form in the effort to socialize medicine. The editorial policy has been directed chiefly to that issue. Items of special interest to our members have been used with quotations and editorial comments along the line of our greatest interest.

JMSMS has continued the policy of making the covers really distinctive in that they emphasize some of the major activities of the Society. The April number was devoted to Cancer with a special cover stressing the fight against this disease. The May issue honored the member selected as Michigan's Foremost Family Physician, to be especially congratulated for his attainments. The June number was devoted to Michigan Medical Service. The July number contained, in addition to the roster of the Michigan State Medical Society, a list of the Women's Auxiliary membership, published for the first time. The August number was devoted largely to the Annual Session. The September issue featured Rheumatic Fever. The October number was devoted to Michigan Foundation for Medical and Health Education. The November issue featured Tuberculosis; and the December issue was devoted to Heart Disease.

Since 1902, when THE JOURNAL was established, its first and most important function has been to carry to our members matters of special interest to them, both scientific and economic. The Publication Committee has endeavored to continue that program. The Council believes our members are as well informed as any group in the country; that being true, our efforts have been well rewarded.

Finances

An audit of the books of the Society was completed by Ernst and Ernst, certified public accountants as of December 23, 1949. This has been submitted to the Finance Committee for study and is available to any member of the society for perusal at the Executive office, 2020 Olds Tower, Lansing, Michigan.

A brief summary of the audit produces the following information:

Assets:	
Cash	$ 70,652.74
Accounts Receivable	9,065.69
Securities	89,273.22
Total	$168,991.65
Liabilities:	
Accounts Payable	4,617.01
Unearned Income	8,790.00
Reserves	97,781.05
Surplus	57,803.59
Total	$168,991.65

From the *Income and Expense* statement we find that the total regular income of the Society for 1949 (to December 23) was $59,125.76 with total expenses of $73,285.66 indicating net expenses of $14,159.90, representative of the fact that the operating expenses of the general funds of the Society are not met by the income from regular dues, JOURNAL and interest.

A study of the Reserves of the society as of December 23, 1949, indicates balances as follows:

Public Education (General Activities)	$35,238.62
Public Education (Special Activities)	33,254.46
Rheumatic Fever	28,887.97
Lecture Grant	400.00
Expenses during 1949 from these reserves were as follows:	
Public Education (General Activities)	$81,386.38
Public Education (Special Activities)	66,745.54
Rheumatic Fever	21,962.03
Lecture Grant	100.00

1949 Annual Session

The 1949 Annual Session held in Grand Rapids in September showed a total registration of 2,329 which was an all-time high in attendance at an out-state meeting of the Michigan State Medical Society.

The General Assembly type of program with daily discussion conferences was continued as in recent years and brought to Michigan twenty-nine essayists.

The exhibit during this Annual Session was comprised of fifteen scientific exhibits and one hundred six Technical Exhibitors in one hundred thirty-four spaces. This was the largest exhibit in the history of the Michigan State Medical Society.

The policy of bringing to the Scientific Assembly out-of-state essaysists of national and international reputation was continued and no expense was spared in making the meetings as interesting and instructive as possible. In spite of the rapidly rising costs of operation a modest gross profit before proration of salaries accrued to the society from the Annual Session.

To the 106 technical exhibitors, the registrants showed their usual appreciation and gave them very generous attention.

1949 House of Delegates

The House of Delegates, in five sessions, transacted the legislative business of the Society with as much dispatch as possible consistent with thoughtful deliberation. Some of the highlights of the transactions of the House of Delegates were:

(1) Adopted Resolutions concerning:
   (a) Special assessment ($25) for 1950.
   (b) Proposed Reorganization of American Medical Association.
   (c) Uniform Policy in Polio Cases.
   (d) Testimonial to the late T. K. Gruber, M.D.
   (e) Appointment of Special Committee to Survey MSMS Councilor Districts.

(2) Took action on other matters as follows:
   (a) Disapproved Petition to create 19th Councilor District.
   (b) Discharged the State Veterans Affairs Committee.
   (c) Discharged the State Interprofessional Committee.

(3) Instructed The Council to appoint a study commission on The Healing Arts.

(4) Elected Wilfrid Haughey, M.D., Battle Creek, as "President for a Day."

(5) Elected 10 Emeritus Members
   38 Life Members
   66 Associate Members
   8 Retired Members
   1 Non-Resident Member

(6) Adopted Amendments to MSMS By-Laws, as follows:
   re Associate Membership for postgraduate students.
   re Voting Power of Vice-Speaker.
   re Councilor Districts in Wayne County.

Michigan Postgraduate Clinical Institute and Heart and Rheumatic Fever Day

This third annual scientific institute held under the sponsorship of the Michigan State Medical Society in cooperation with the University of Michigan Medical School and Department of Postgraduate Medical Education, Wayne University College of Medicine, the Michigan Foundation for Medical and Health Education, Inc., and the Wayne County Medical Society was held in Detroit on March 23-24-25-26, 1949.

This Institute designed to provide a high type scientific program, encourage Michigan physicians to prepare presentations and to publicize Michigan as a medical center this year featured thirty-three Michigan doctors of medicine on the program and nineteen out of Michigan essayists.

The Institute was an outstanding success as evidenced by the fact that it produced a total registration of 1,627 with physicians present from Michigan, all nearby states and Canada.

County Secretaries—Public Relations Conference

A Conference of County Secretaries and other officers and members of component county groups was held in Detroit on January 9, 1949. This all-day conference was attended by over 197 County Society Officers, County Society Public Relations Committee Chairmen, Members of the Michigan State Medical Society Council, Legislative Committee and Public Relations Committee and Officers of the Woman's Auxiliary.

This conference featured techniques of county society organization and operation, an exposition of the major activities of the State Society as related to the County Societies and information necessary for the development and maintenance of good public relations and public education.

Committees

Limitation of time and space makes it impossible to detail in this report the activities of all the committees contributing to the many splendid programs of the State Society. The accomplishments of the committees of the Society were achieved at the expense of many hours of personal sacrifice on the part of the personnel of the various committees. During 1949 the sixty-two committees of the Michigan State Medical Society held a total of eighty-seven meetings and practically every meeting was attended by one or both of your secretaries. A total of 526 fellow members in your State Medical Society gave freely of their time to attend these meetings and assist in the operational activities of the State Society. Too much commendation cannot be accorded the committee members who contributed their time and effort to develop and execute constructive programs—both scientific and economic—for the public welfare and to maintain the position of leadership of the Michigan State Medical Society in the field of progressive medical planning.

Rheumatic Fever Program

This Society-sponsored program of consultation and diagnosis in the field of Rheumatic Fever demonstrates the voluntary approach in the field of preventive medicine. There are now operating or in the process of development over thirty centers in Michigan. The Michigan Society for Crippled Children and Adults, Inc., has continued its financial support of this program with the contribution of $6,000.00 and the newly created Michigan Heart Association contributed $32,515.72. Also this year saw another organization, the Michigan Chapter of the Arthritis and Rheumatism Foundation, take an active interest in this Rheumatic Fever program by the contribution of $4,500.00.

We must emphasize that the Rheumatic Fever program is a voluntary effort of the medical profession of this State, aided financially by three other voluntary groups, to demonstrate its ability to conduct successful programs in the field of Public Health; that it is an educational effort both for physicians and the public; that it is being viewed with interest and sometimes envy by other groups and agencies; and that if it fails for lack of support by the individual physicians and county medical societies of the state the medical profession will be open to ridicule and further attempts to bring into the doctors' control the remaining modern procedures of medical practice—(viz. Rheumatism, Arthritis, Cerebal Palsy, Epilepsy, et al.) will be impossible.

Michigan Heart Association

The rapidly increasing Rheumatic Fever Program developed the need of establishing a project to include studies and activities in other forms of Heart disease. The Council, in 1948, approved the formation of a Michigan Heart Association under the aegis of the State Society as an affiliate of the American Heart Association. This association is now in operation and will further broaden the scientific activities of the State Society.

Michigan Heart Association was incorporated as a non-profit organization in Michigan on February 17, 1949, with C. E. Wilson, Detroit, as Chairman of the Board; W. B. Cooksey, M.D., Detroit, President; and L. Fernald Foster, M.D., Bay City, Secretary; Leon De Vel, M.D., Executive Secretary. The Michigan Heart Association was recognized as an affiliate of the American Heart Association in May, 1949, and the new organization has as one of its important projects for the ensuing year, a joint sponsorship with MSMS and the Michigan Society for Crippled Children and Adults, Inc., of Michigan Rheumatic Fever Control Program.

Contacts with Governmental Agencies

During 1949 your Society maintained active and friendly contacts with many governmental agencies at local county, state and national levels. Included in these contacts were:

The Governor of Michigan
The Michigan Crippled Children Commission
The State Board of Registration in Michigan
The Basic Science Board
The State Department of Public Instruction
The University of Michigan
The Michigan State College
Wayne University
Federal Hospital Survey and Construction Administration
The U. S. Senators and Congressmen from Michigan
The State Health Commissioner
The Michigan Mental Health Commission

Contacts with Non-Governmental Agencies

During 1949 the usual active contacts were maintained with many non-governmental agencies—especially

Michigan Medical Service
Michigan Hospital Service
Michigan Society for Crippled Children and Adults, Inc.
Michigan Health Council
The State Associations of
- Nursing
- Pharmacy
- Dentistry

The State Tuberculosis Association
The Michigan Foundation for Medical and Health Education
The Michigan Heart Association
The Rural Health Conference and its 49 other groups
The National Foundation for Infantile Paralysis

National Associations contacted in various ways during the past year were:

American Cancer Society
American Red Cross
Particularly in connection with the Blood Bank Program

National Conference on Medical Service
Conference of Presidents and Other Officers of State Medical Associations
Associated Postgraduate Committee

Distinguished Health Service Awards

The third series of awards was made in 1949 to:
Mrs. Hall Blanchard, Jackson, Michigan
Mr. Burton Laraway, Jackson, Michigan
Mr. Carl M. Saunders, Jackson, Michigan
Mr. W. K. Kellogg, Battle Creek, Michigan

Society Activities

Many contacts were made during the year with members of the Society at Councilor District Meetings and County Society Meetings. These contacts were made by various members of the administrative personnel and were designed to publicize the various activities of the State Society and to allow a discussion of any question propounded by the members present. These meetings developed a critical discussion of the problems of the local and State organizations, problems of the public relations, the "dispractices" of medicine and other subjects bearing upon the development and maintenance of activities necessary to the establishment of medical practice on its deserving high plane.

Officers attended numerous Michigan county and district medical society meetings during the year and were honored by being invited to speak before state and county medical societies in Illinois, Indiana, New Jersey, Ohio, Oregon, West Virginia, and Montana. Their presentations before lay and civic organizations during the past twelve months—particularly after the inauguration of the CAP program—totaled hundreds of appearances, with messages beamed to the theme that voluntary medicine has achieved the best results for the people's benefit and is to be preferred to a compulsory federally operated type of political foreign medicine.

Secretary's Letters

As part of the Society's general educational program for individual members and component County Societies there were issued during the year 1949, thirteen Secretary's Letters, seven to county secretaries and keymen and six to all members of the Michigan State Medical Society.

Office Personnel

During 1949 the Executive Office Personnel has discharged its many duties with extra loyalty and untiring effort.

The still-existing crowded and scattered condition of our Executive Offices is working an ever-increasing hardship on the whole office personnel and is not conducive to good morale and the greatest efficiency.

Foremost Family Physician Award

The third annual "Foremost Family Physician Award" was accorded Charles J. Maxwell, M.D., of Paw Paw, Michigan. The award will be officially made in March, 1950, on the occasion of the Michigan Postgraduate Clinical Institute.

Public Relations

Upon a foundation of informed thinking and hard won experience, the Michigan State Medical Society has built a public relations activity that is unique.

In this annual report, it is impossible to do justice to medical public relations activity in Michigan by citing only those developments of a concrete nature that show on the surface. I plan to list some of the specific activities, but it should be remembered that while those intangibles that exist below the surface are nonetheless factual in nature, some of these unseen factors are plans, movements, investigations and contacts which were made yesterday and will bear fruit today and tomorrow.

In listing the activities I have tried to indicate the cause and effect factors involved. Consequently this report is divided, so that the cause for the activity is listed, followed by the effort made and concluded with the effect gained.

Campaign to Preserve the American Voluntary System of Medical Practice

Cause.—The threat of the Wagner-Murray-Dingell type of legislation came into sharp focus through the support given compulsory sickness insurance by the present Administration. Their entire concept of health care constituted a threat to the health of the people of Michigan and the United States. In consequence we determined upon a strong campaign to resist the imposing of this concept upon the people. This campaign began one year ago today and was called the CAP plan, meaning "Co-operation with the American People."

Effort.—After nearly three months of exhaustive work, planning and preparation The Council approved the CAP campaign. It has proven sound in every detail. Here is how it was implemented:

Nationally.—On February 12, 1949, the plan was presented to twenty-two state medical societies in Chicago. It was adopted in its entirety by seven states and in part by many others as is concretely indicated by the fact that 544 requests have come to Michigan from organizations outside this state for specific assistance. This figure does not include requests from individuals outside of Michigan. Nor does it include the invitations to MSMS speakers to travel to other states to tell what we are doing and how it is being done. Such talks were given before sixteen national groups, nineteen statewide conventions of various medical organizations and many local and regional meetings outside Michigan. Nor does it include requests for advice. This latter category has never been tabulated but their frequency has been daily in occurrence. The specific instances cited include only the use of our films (72), radio programs (10), printed speeches (230), and literature developed in connection with the CAP campaign (232). We have actively co-operated with the American Medical Association. We have actively participated in a minimum of twenty-one national conferences and had contact with other national groups.

Statewide: On January 9, 1949, the County Secretaries and Public Relations Conference received the CAP Plan. A Booster Session was held on March 24, 1949. Fourteen Councilor District CAP meetings were held in the spring and fourteen in the fall in addition to special treatment given in the four districts constituting Wayne County. A statewide CAP organization was set up headed by the Special Committee on Education and divided into District and County organizations. The Woman's Auxiliary was organized on the same basis. Six Public Relations Field Representatives were employed, trained and developed into a working team. Work was re-assigned to four representatives during the summer months. A Speakers Bureau Training and Organizing Program was held in Grand Rapids on September 22, 1949, and carried into each Councilor District, in the subsequent CAP meetings. Speeches were made before more than 1,432 groups, 7,464 radio programs have been put on the air, over 1,231,000 pieces of literature have been distributed. Eight pamphlets have been developed and printed and four pamphlets reprinted. 7,120 news releases have been made, twenty-seven articles written for journals having a statewide distribution. We have prepared and filmed one commercial motion picture and placed another in 312 theaters. We have prepared and placed three ads in forty-nine daily and fifty-six weekly newspapers, and one magazine, going to a reading circulation of 1,250,000 persons. Twenty-seven CAP and Legislative Bulletins have been issued to a mailing list of 991 members of the MSMS and Woman's Auxiliary, seven of these to the entire membership of the MSMS and four to the entire

membership of the Woman's Auxiliary. We have had a close working relationship with nearly every Michigan statewide health organization and some active contact with scores of other state organizations which have a major interest in health or in the problem at hand.

County and Local.—In fifty-five County Medical Societies, fifty-five CAP Committees have been organized with additional sub-committees. Hundreds of meetings have been held in these medical societies on this program. The distribution of literature, the speeches, and some of the radio programs, listed above of course have been carried out by the individual doctors and their wives as well as some laymen. Valuable contacts have been made in nearly every community of Michigan with other organizations in that community. *Most important of all is the fact that it is conservatively estimated that well over 100,000 persons have been individually addressed by Doctors of Medicine on this subject attributable in a great degree to this CAP campaign.*

Effect.—A ground swell of opposition to the leanings of the socializers has been started. Two hundred and fifty-one groups have passed resolutions against socialized medicine. Aid was evidenced in opposition to the President's Reorganization Plan No. 1. National leadership has been given in the campaign. Legislation which would have placed doctors under Social Security has been successfully protested. The Legislature of Michigan has gone on record against Socialized Medicine. Legislative activity has been successfully carried out in connection with forty-nine bills directly affecting medicine and health.

Experience has been gained pointing to the need for greater co-ordination in 1950 with other organizations. Great opportunities for assistance lie in the help that is ready to be given by such organizations as the Junior and Senior Chambers of Commerce, the State Bar of Michigan and the Junior Bar Section, the representatives of the Drug and Insurance industries. These resources are almost untapped and should constitute a major portion of our effort in 1950.

Experience has further shown us that in the CAP campaign we are carrying on a program that merits continuation in 1950 with the full support of every member of the MSMS and indeed of every person in Michigan who believes in the American way of life.

Experience from a trial meeting with the Press and Radio in the Bay City area has indicated the value of repeating such meetings in various districts in the state.

Improvement of Working Relationship with Rural People and Interests

Cause.—Much has been said especially by the would-be socializers about the paucity of doctors in rural areas, the lack of health facilities, the scarcity of general practitioners, the lowering of health standards in rural areas, etc.

Effort.—We have completed and are evaluating a survey of health in Michigan. We have been one of the strongest participants in the Michigan Rural Health Conferences. We have published two rural health conference reports and assisted in the third. We have established close liaison with the Michigan Farm Bureau and the Michigan Grange. We have repeatedly met with these two groups on the state and local levels. We have made a strong effort to meet the needs of these areas by the development and proper publicizing of such programs as the Doctor Placement Service, the Loan Fund for the Encouragement of Practice in Rural Areas (sponsored by the Michigan Foundation for Medical Health Education) the support of the Michigan Hospital Survey and Construction program, the Rheumatic Fever Control Program and the Hillsdale Cancer Detection Plan. These plans have not been carried out through the public relations activity of the MSMS but active support has been given them in their relationships with the people of Michigan.

One of the foremost efforts in the field has been the reactivation of the Michigan Health Council and the establishment of community health councils. Working closely with this organization we have developed close liaison with many state and local organizations which constantly prove valuable.

Effect.—We have retained the support of the agricultural interests of the state. The understanding gained has been that we have their interests at heart and are doing something about them and on the other hand they are earnestly supporting our stand on the question of socialized medicine and in other programs as well Experience gained has indicated that our support of the Michigan Health Council, the Michigan Rural Health Conference, the Michigan Foundation for Medical Health Education, and the other activities listed above inures to the benefit of the medical profession and should be continued.

Improving Working Relationships with Other Professional Health Organizations

Cause.—From time to time questions have arisen between the medical profession and other business and professions which deal directly with health. These have led to recriminations affecting the public relations of the doctors.

Effort.—Joint meetings with these groups have been held throughout the year. Closer co-ordination has been gained between the officers and the lay administrators of these organizations by close contact and mutual assistance.

Effect.—A greater bond of sympathetic understanding of each other's problems and of mutual problems has been gained and in many cases understandings as to methods and necessary changes in methods has been worked out to the satisfaction of all concerned. This again has improved the public relations of the doctors.

Supporting of Health Measures to Improve the Public Welfare

Cause.—The question of the sex deviate and the teaching of sex hygiene in the schools has taken a position of importance in the public mind. The development of local health departments and their support has become important in the public eye. The activities of voluntary health organizations such as the Cancer Societies, the Heart Association, the Tuberculosis Association and others are becoming increasingly important.

Effort.—We have taken a positive public position on questions such as the sex deviate, the establishment of local health departments, etc. We have established close liaison with the voluntary health organizations especially pertaining to their public educational activity.

Effect.—We have received repeated commendation in the public prints for the work being done on these questions of public interest. We have made progress toward co-ordinating the public educational program of the MSMS with that of the voluntary health organizations to the benefit of both. Experience gained has indicated that such activity should continue and expand.

Development of Health Information Centers

Cause.—Due to the multiplicity of health services now being offered to the people of Michigan brought about to a large extent by the medical profession the question of whom to see about this problem and where to get help

on some other problem has become so complex that in order to actually make them available most effectively to the people some system of answering the questions of the individual citizen must be developed.

Effort.—Plans are being made for the establishment of a Health Information Service in eighteen communities of Michigan. This would be a phone answering service for referral of the questioner to the proper sources of information. The development of this service through the District branches of the MMS and MHS is being contemplated with the organizational work done by the Michigan Health Council and the Community Health Councils and with the advice of the County Medical Societies.

Effect.—This program in its planning stages has received the enthusiastic interest and support of legislators, the Michigan Health Council, the Executive Committee of the MSMS and the Special Committee on Education, the Associated Medical Care Plan officials and others.

It has shown sufficient promise so that the enthusiastic support of this program, and the greatest publicizing of it, is felt to be highly desired.

Educational and Co-ordinating Activity with Medical Associate Groups

Cause.—Due to the increasing demand for services supplementary to those requiring the judgment and skill of the medical doctors and due also to the necessity of combatting the introduction into the field of professionals of sub-standard healing; and also because of the willingness to serve the medical profession with medical assistance groups, it was felt that action should be taken toward improving the facility and possibilities for training of Medical Associates, and also for working with them in activities of a socio-economic nature.

Effort.—We have prepared and distributed a brochure outlining the opportunities and additional standards in the field of the Medical Associates. Over 18,000 of these brochures have been distributed to the schools of Michigan supplemented by personal visits through the members of the Women's Auxiliary of MSMS. In addition, we have included the Medical Associates organization in our State meetings and they have been included in local meetings of the County Medical Societies on socio-economic problems. Meetings have been held with college educators and advice given regarding medical associates to the Michigan Department of Public Instructions.

Effect.—The effect of this close liaison activity has been to secure support and additional offers of support by Medical Associates organizations, the acceptance of guidance from the Medical profession by these groups and nationwide credit for the development of a Medical Associates program.

Conclusion

Efforts in the CAP campaign and in the general public relations program of the MSMS should continue and be increased in the coming months, with emphasis throughout on the idea that Socialism itself (including socialized medicine) must be defeated. This is the strong feeling of the doctors of medicine in Michigan. Credit for the present success of the public relations program and its future promise is directly attributable to the payment of the $25.00 assessment by the general membership, to the untiring efforts of L. W. Hull, M.D., Chairman of the Public Relations Committee and the Special Committee on Education, to the work of the Members of The MSMS Council, to the CAP District Leaders, to the County Medical Society officers, and CAP Committee leaders and to the hundreds of unsung individual doctors who have vigorously supported the program

Our gratitude goes to each and every one—with the fervent plea that the active effort is maintained even more vigorously in 1950.

Summary of Progress in Michigan

That the Michigan State Medical Society is a progressive organization is a well-known fact. Long ago, the pioneering activity of Michigan's medical men was epitomized in the phrase "Another FIRST for Michigan." There are now over twenty-six "Michigan FIRSTS" outstanding among which are the following:

1. Established Michigan Medical Service (Blue Shield)
   Gave strong aid in establishment of Michigan Hospital Service (Blue Cross)
2. Established 26 Cancer Control Clinics and co-ordinated all cancer activity in Michigan
3. Established Rheumatic Fever Detection and Control Program (30 Detection and Control Centers)
4. Established Medical Associates Program
5. Set up year round continuing Postgraduate Training Program for Doctors in their home localities
6. Established two annual Postgraduate Clinical Conferences for all Doctors of Medicine
7. Established "Immunization Month"
8. Organized National Conference of Presidents
9. Organized National Conference of Public Relations Counsels
10. Organized National Conference of Legal Counsels of State Medical Societies
11. Established first year round radio series—"Tell Me, Doctor"
12. First State to use commercial distribution for medical motion pictures
13. Organized Michigan Health Council
14. Organized Michigan Rural Health Conference
15. Established Michigan Foundation for Medical and Health Education, Inc.
16. Established Mediation Board for hearing of Grievances
17. Established system of awards for outstanding lay leaders in health work
18. Set up network of Health Information Center (in Process)
19. Established Field Secretary network for implementation of Public Relations Program
20. Prepared sex education course for Public Schools
21. Set up first organized effort to solve sex deviate problems
22. Established Doctor Placement Service
23. Developed uniform fee schedule for governmental agencies
24. Established plan for Home Town Care of Veterans
25. Created first Medical Veterans Readjustment Board
26. Stimulated activity for creation of a National Health Congress

Officials of other state societies credit the advance of Michigan Medicine to the leadership which has been the good fortune of MSMS for many years.

A study of the "Top Command" should bring out some illuminating information and perhaps give reason for the Society's progress.

First, one is struck by the great change among the leaders of the Michigan State Medical Society—on the policy—making Council and among the officers—in a short space of years.

For example, not one Councilor on the 1935 Board still serves in that capacity.

Of the sixteen Councilors who served the profession in the years 1936, 1937, and 1938 but one remains in that capacity.

Only two councilors carry on from the year 1939.

From 1935 through 1949, a period of fourteen years, sixty-five changes among members of The Council and MSMS officers have occurred, including addition of the two new Councilors from Wayne County made by the 1948 House of Delegates.

Recommendations

As a result of a careful analysis of the Society's activities, the prospective economic conditions and the attitude of the public toward medical organizations, I respectfully submit the following recommendations for your consideration:

1. That since the $12.00 dues do not meet the operating expenses of the society, that provision be made for an allocation of part of the $25.00 assessment for these obligations.
2. That efforts to secure more adequate quarters for the Executive Offices be accelerated.
3. That District Conferences with Editors and Newspapermen be held in all parts of the State, this being designed to develop a better "Press" and to better inform the public on the scientific and economic aspects of modern medical practices.
4. That the MSMS through its Councilors and Public Relations Department attack vigorously any lethargy or lack of co-operation in the Rheumatic Fever program and the activities of the Michigan Heart Association on the part of any component County Medical Society, and that this campaign, to make every center active, be made a ninety-day project of the MSMS, among the top priorities, beginning March 1, and that a re-survey of this three-month project be made and presented to The Council by the Medical Co-ordinator of the Rheumatic Fever Control program in July, 1950.
5. That the Councilors be requested to impress on each of their component county societies the importance of having heretofore inactive members appointed to the personnel of their committees—especially to those committees dealing with the social and economic problems of medicine.
6. That in view of the "Speakers Bureau" activities of such organizations as the Junior Bar of Michigan, the Junior Chamber of Commerce, the Drug Industry, et al., the Special Committee on Education be instructed to develop the co-operation of these groups in the 1950 campaign for "Americanism."
7. That because of its educational value, the annual contact with Michigan Senators and Crongressmen in Washington be continued in 1950.

Your Secretary desires to express to the members of The Council his sincere appreciation for their fine personal and collective co-operation and the encouragement they have accorded him during 1949.

To the Executive Office personnel, Mr. H. W. Brenneman, Public Relations Counsel, and assistant counsel, Russell F. Staudacher, Mr. J. Joseph Herbert, Legal Counsel, and to Dr. Wilfrid Haughey, Editor, and Mr. Robert Roney, Assistant Executive Director, your Secretary is particularly grateful for their loyalty, willing application to their many tasks and many constructive suggestions. To Executive Director Mr. Wm. J. Burns, I wish to express a special appreciation for his wise counsel, helpful co-operation, and dynamic inspiration.

To all those who have aided so generously in the discharge of the duties of his office, your Secretary is most grateful.

Respectfully submitted,
L. Fernald Foster, M.D.
Secretary

EDITOR'S ANNUAL REPORT—1949

The Journal of the Michigan State Medical Society this year published a few more pages than in the year 1948—1,566. This is the largest since 1946. The pages have run as follows: 1944—1,134; 1945—1,428; 1946—1,682; 1947—1,476.

We have published more original articles from more authors than ever before. There were 174 authors with twelve appearing more than once. In 1948 and 1947 there were ninety-six authors each.

The book reviews have dropped off to seventy-nine as against ninety-six the previous year. This probably represents a tendency of the publishers' cutting down on the number of books.

There were thirty-two death notices against ninety-two for the previous year; but thirty-eight deaths for 1947 and fifty-two for 1946.

The number of editorials continue about equal, sixty-four in 1945, sixty-four in 1946, forty-five in 1947, sixty-one in 1948, and sixty-three in 1949. We have tried to cover editorially every phase of medical interest of which we were capable. We have stressed the socio-economic field, particularly, because of our belief that in these changing times with the threat of state socialism so ominous, our members at all times must be well posted on the professional problems, ambitions and objectives.

The editor expresses his appreciation to the Publication Committee, and to the other members of The Council, and numerous members of the State Society for hints or suggestions which have benefited the appearance and structure of The Journal, contents of The Journal, and have many times suggested editorial expression. The policy has been to help make Michigan one of the foremost states in medical thought and activities, and that has been accomplished.

We are proud of the appearance of The Journal this year, of its various covers outlined in color, suggesting diverse activities of the profession. Also of the general interest material which has been published.

We have received numerous letters of congratulation, and have just received a request for a copy of our November number, the Tuberculosis number, for the National Association for the Prevention of Tuberculosis, in England.

We have dedicated the April Number to Public Relations; the October Number to the Michigan Foundation for Medical and Health Education, Inc.; the November Number to the Michigan Health Council (including the Michigan Rural Health Conference).

We have at last succeeded in having three numbers of The Journal, the last three, published during the month appearing on the date line, with a promise from the printers that this will continue, and that we will soon be back on the 15th date.

Again I express my thanks to the Publication Committee and members of The Council.

Respectfully submitted,
Wilfrid Haughey, M.D., *Editor*

FOUNDATION PRESIDENT'S REPORT

The Michigan Foundation for Medical and Health Education, Inc., sponsored by the Michigan State Medical Society five years ago, held the Annual Meeting of its Membership and of its Board of Trustees on January 19 in Detroit. The following report on the activity of the Foundation during the past year was presented to the Membership by E. I. Carr, M.D., Lansing, President of the Foundation:

The activities of the Foundation, during this past year, have centered around the Third Annual Michigan Rural Health Conference for it was at the last annual meeting

of this corporation that your board of trustees agreed to sponsor the Conference of 1949 and to underwrite it to the extent of $2500.00. At the first meeting of the Committee on Arrangements for the Michigan Rural Health Conference, the President of this Foundation was elected Chairman of the 1949 Conference. It was voted that the facilities of Grand Rapids and of Western Michigan be chosen for that year. Fifty-three co-sponsors joined hands to promote this growing, expanding and increasingly comprehensive cause for the promotion of rural health. The Executive Secretary of the Michigan Health Council, Mr. Eugene H. Wiard, was indispensable to the success of the Conference, as secretary and executive supreme.

The Conference was held for two days, October 28 and 29 in the Pantlind Hotel and the Civic Auditorium. The Conference was opened by the General Chairman, your President, and Governor G. Mennen Williams presented the opening address. The Local Chairman of the Conference, Ira Dean of Grand Rapids, welcomed the group. The history and background of the Foundation were given by its President and follow in part:

"The Michigan Foundation for Medical and Health Education is interested in this Michigan Rural Health Conference because it is directly concerned with better distribution of medical care. No country in the world has so many doctors per capita as has America. At the present moment, there is one doctor for every 790 of the population of the United States. No other country in the world approaches this ratio of medical service. In New York City, the ratio is one to every 400 of population. The fly in the ointment for this distribution is the lamentable fact that metropolitan districts and specialism have become so attractive to young men in medicine that many rural districts are without doctors of medicine. In medical practice, as is true in almost all walks of life, thought has been turned to shortened hours, bright lights and daily entertainment. Furthermore, the vogue for special training, immediately following graduation in medicine in preparation for examinations to qualify in specialties, has usurped so large a number of recent medical graduates that general practice has become seriously depleted. A counter influence, fortunately, has already developed to meet and remedy this situation. State and national associations of general practitioners have been organized and the challenge, for a remedy to meet the dearth of young general practitioners, has been assumed by the American Medical Association and by many state medical societies. Influence has been directed towards medical school faculties to muster their recognition of this need. Another correction which has been striven for is to rectify the frequent omission of early experience in general practice whether general practice or specialism is to follow.

"The important point, toward which I am leading, is this: Rural practice, selected early in the career by a young doctor of medicine, accomplishes needed medical service in rural areas by those who may later choose a specialty. Many of the greatest specialists in the land climbed the ladder of fame through early rural practice. Again, many an aspirant for a specialty has found so great satisfaction in the life of the rural community that he has remained a practitioner and valued influence in the country or in the small town. Also, it is frequently observed that a recent graduate, who has trained immediately and directly for a specialty, has, for economic reasons or for experience, taken up an intended brief residence in a rural area and has found the pleasant living and the responsibilities of the small community so attractive that he has abandoned the specialty for which he trained.

"The Michigan Foundation for Medical and Health Education, fundamentally interested in the finance of education, has found a great opportunity for service in concerning itself with the medical needs of rural areas. It has found that this subject is one of the most challenging projects of this era. It is plain to see that while the Michigan Foundation is concerned with the education of medical students and young doctors, it is, at the same time, equally concerned with medical service in rural areas. Aiding and helping in medical education parallels an effort to aid in the better distribution of medical care.

"A concrete illustration of the Foundation's work in this field is the establishment of a revolving fund to encourage medical practice in rural areas. The fund provides supplemental financial aid to upper classmen in medical schools and interns and residents in hospitals, who, in return, will agree to practice in a rural area for a minimum of three years. A rural area we define as a community not to exceed 5,000 in population.

"Another illustration is the part that the Michigan Foundation took in contributing to the extent of its ability in conjunction with the Michigan State Medical Society, in a survey and research, conducted by the Sociology Department of the Michigan State College, to ascertain the medical needs in rural areas in the State of Michigan. These studies were conducted by Professors Charles P. Loomis, Charles R. Hoffer and Edgar A. Schuler. The value of this study was recognized by other states and national groups.

"In past years, the Foundation has co-sponsored various movements including Postgraduate Clinical Institute (a three-day postgraduate meeting for the practicing doctors of Michigan), Michigan Rural Health Conference, Michigan Heart and Rheumatic Fever Postgraduate Conference (another postgraduate course for practicing physicians), and Cancer Control Conference (for education of the public particularly, as well as of physicians)."

The foregoing part of the program was broadcast through the generosity of radio station WKAR for a full 30 minutes. Several other broadcasts were provided and preceded the Conference to publicize the plans for rural health betterment. The general assembly also included review and history of the Conference by Dr. Zemmer, the first chairman of these meetings, and Mrs. Charles Sewell of Chicago and The Farm Bureau presented a talk entitled, "Come Let Us Reason Together." The assembly was then divided into ten discussion groups of regional character and local health problems were explored. These findings are printed in the Report of the Conference. There were two speakers at the dinner meeting, Dr. J. S. DeTar of Milan who discussed "Significant National Trends During Three Years of Rural Health Conferences," and Mr. Paul D. Bagwell of East Lansing, Chairman of the Department of Written and Spoken English at Michigan State College and immediate Past President of the United States Junior Chamber of Commerce, had as his subject, "Hats Off To The Past—Coats Off To The Future."

The following morning reports of each discussion group were amalgamated. Obtaining and retaining medical practitioners in rural areas was the foremost feature subject by vote and by obvious interest and discussion and all felt the need of better community and physician understanding.

Next, the four voted problems were handled in four groups by the moderators and by the experts. There were:

1. Obtaining and retaining an M.D. in a rural area.
2. Community health education.
3. Rural public health.
4. Medical care facilities.

The 1949 Conference ended with a talk by Dr. J. O. Christianson of St. Paul who is Superintendent of the School of Agriculture of the University of Minnesota. An innovation at this Conference was the Farm Theatre. Five films were shown and this proved a popular part of the Conference. The accomplishments of the Conference are shown in the following resolutions:

1. That discussion pertaining to health personnel problems of a combined lay and professional character in a community should be initiated principally by lay groups, preferably through the medium of a County Health Council. That the local and state co-sponsoring groups explore the important question of making living, social and financial conditions of a nature to attract young medical practitioners and especially those with families, to locate in rural communities.

2. That Community Health education be implemented by training of persons in the mechanics of accomplishment of those objectives.

3. That the obtaining of local health departments is best achieved by co-operation between interested local groups and boards of supervisors.

4. That the Office of Hospital Survey and Construction give highest priority in its future construction plans to public health and medical care centers in isolated rural communities in order to attract physicians to such communities.

That greater emphasis be placed by the Office of Hospital Survey and Construction upon the widest possible distribution of information concerning the hospital and health center construction program under Public Law 725.

That the education of nurses, medical technologists, physical and occupational therapists and dietitians is primarily a responsibility of the public schools, colleges and universities which should set the standards and assume the major financial responsibility.

That the hospitals and health centers in every community be utilized to the fullest possible extent in such an educational program to make educational opportunities conveniently available to everyone.

That the opportunities for service in the health field be emphasized by vocational guidance councilors in the public schools, colleges and universities to the end that adequate numbers of trained personnel are available at all times to staff the health services of Michigan.

5. That a meeting of all co-sponsors of this Conference be called by the presiding chairman of the Conference at the earliest reasonable date following this meeting—preferably not later than January 31, 1950, for the purpose of determining upon a place and date and a Committee on Arrangements for the fourth Annual Michigan Rural Health Conference to be held in 1950.

As sponsor of this Conference the Foundation may feel justly proud of a service rendered to rural Michigan.

The attractive brochures before you on the 1949 Michigan Rural Health Conference are being distributed to all registrants of the Conference, to the attendants of the Secretary's Conference so that they will reach every County Society, and arrangements have been made for distribution at the Kansas City National Rural Health Conference next month and the American Medical Association has already requested 500 copies.

The Foundation is grateful for the Foundation Number of October, 1949 for the *Journal of the MSMS* to the several radio broadcasts principally through the courtesy of WKAR and to the many referrals on educational matters to the secretary's and president's offices and for various other means of effective publicity.

The revolving fund has not yet been utilized because of a prevailing hesitancy against a commitment to pay back.

To meet the many challenges and your wishes for Foundation activity the burning question still confronts us "how to get money."

TREASURER'S ANNUAL REPORT—1949

The changes in bonds owned during the year were as follows:

Balance at January 1, 1949 (at cost)			$89,476.60
ADDITIONS			
Purchase of United States Savings Bonds, Series F, maturing Dec. 1, 1961 (Principal amount $12,400.00)		$ 9,176.00	
Increase in redemption value of United States Savings Bonds, acquired in prior years	$122.20		
Less amortization of Bond Premium	12.83	109.37	
			$ 9,285.37
			$98,761.97

DEDUCTIONS

Description of Bonds Sold:	*Par Value*	*Cost*	*Sold For*	*Accrued Int.*
Canadian Pacific Railway Co. 4%, Perpetual	$ 2,000.00	$1,855.00	$1,967.50	$ 34.89
Detroit Edison Company, 3½%, maturing Sept. 1, 1966	$ 2,000.00	$2,187.50	$2,135.00	$ 18.86
Grand Rapids Affiliated Corp. 5%, maturing Oct. 1, 1955	$ 2,000.00	$1,650.00	$1,960.00	$ 18.61
New York Central Railroad Co. 4%, maturing Feb. 1, 1998	$ 2,000.00	$1,173.75	$1,080.00	$ 28.22
Southern Pacific Company, 4½%, maturing Mar. 1, 1977	$ 2,000.00	$1,322.50	$1,977.50	$ 24.25
	$10,000.00	$8,188.75	$9,120.00	$124.83

Above Bonds sold, were deducted at cost $8,188.75

United States Savings Bonds, Series "D" matured Apr. 1, 1949	$1,300.00*	$ 9,488.75
		$89,273.22
Above Bonds sold for (at Market Price)	$9,120.00	
Accrued Interest	$ 124.83	
	$9,244.83	
Expense of selling Bonds	$ 62.19	
(Commissions chg'd, Taxes, Postage, Bank Serv. Chgs.)		
Net proceeds from sale of Bonds	$9,182.64	
A credit difference	$ 6.64**	
Cost of United States Savings Bonds, Series "F"	$9,176.00	

**In explanation of disposition of matured Bonds:*
United States Savings Bonds, Series "D" matured Apr. 1, 1949 and were redeemed for $1,300.00, par value, which funds were deposited in The Detroit Bank and credited to account of Michigan State Medical Society.

***In explanation of disposition of credit differences:*
Proceeds from sale of above bonds was reinvested in Government Series "F" Bonds, with exception of $6.64, which was deposited in The Detroit Bank and credited to account of Michigan State Medical Society.

REPRESENTED BY—		
Bonds for general purposes	$59,273.22	
Bonds designated for Public Education Program	$30,000.00	
		$89,273.22

INCOME

Cash Balance in Bank, at January 1, 1949		$ 1,624.29
Earnings on Bonds, (Jan. 1, 1949 to Jan. 1, 1950)	$ 2,335.00	
Credit difference between proceeds from sale of Bonds, and cost of Government Series "F" Bonds	$ 6.64	
Proceeds from United States Savings Bonds, Series "D" which matured Apr. 1, 1949	$ 1,300.00	
		$ 3,641.64
TOTAL		$ 5,265.93

EXPENSE

Bank Charge, for safe-keeping of Bonds	$ 46.00	
Bank Charge, for safe-keeping of Bonds	$ 91.80	
		$ 137.80
CASH BALANCE IN BANK (Jan. 1, 1950)		$ 5,128.13
CASH IN BANK (Jan. 1, 1950)	$ 5,128.13	
MARKET, or REDEMPTION PRICES OF ALL BONDS, as of Jan. 1, 1950	$85,969.00	
TOTAL		$91,097.13

The actual cost of these bonds is $89,273.22, which includes the purchase price of interest bearing bonds, and purchase price of bonds bought on a discount basis, plus adjusted increase in value of the latter group.

EARNINGS ON BONDS DURING 1949

Deposited at The Detroit Bank, to the account of Michigan State Medical Society

	Interest Rate	*Date of Payment*		*Interest*	
U. S. Savings Bonds, Series "G"	2½%	Feb.	1-1949	$595.00	
U. S. Savings Bonds, Series "G"	2½	Mar.	1-1949	62.50	
U. S. Savings Bonds, Series "G"	2½	May	2-1949	62.50	
U. S. Savings Bonds, Series "G"	2½	June	1-1949	137.50	
U. S. Savings Bonds, Series "G"	2½	Aug.	1-1949	595.00	
U. S. Savings Bonds, Series "G"	2½	Sept.	1-1949	62.50	
U. S. Savings Bonds, Series "G"	2½	Nov.	1-1949	62.50	
U. S. Savings Bonds, Series "G"	2½	Dec.	1-1949	137.50	
					$1,715.00
U. S. Treasury Bonds	2½%	June	15-1949	$100.00	
U. S. Treasury Bonds	2½	Dec.	15-1949	100.00	
					$ 200.00
Utility Bonds (which were sold)					
Canadian Pacific Railway Company	4 %	Jan.	6-1949	$ 40.00	
Canadian Pacific Railway Company	4	July	11-1949	40.00	
Detroit Edison Company	3½	Mar.	2-1949	35.00	
Detroit Edison Company	3½	Sept.	2-1949	35.00	
Grand Rapids Affiliated Corporation	5	April	6-1949	25.00	
Grand Rapids Affiliated Corporation	5	April	6-1949	25.00	
Grand Rapids Affiliated Corporation	5	Oct.	3-1949	25.00	
Grand Rapids Affiliated Corporation	5	Oct.	3-1949	25.00	
New York Central Railroad Company	4	Feb.	7-1949	40.00	
New York Central Railroad Company	4	Aug.	5-1949	40.00	
Southern Pacific Company	4½	Mar.	4-1949	22.50	
Southern Pacific Company	4½	Mar.	4-1949	22.50	
Southern Pacific Company	4½	Sept.	6-1949	22.50	
Southern Pacific Company	4½	Sept.	6-1949	22.50	
					$ 420.00
TOTAL EARNINGS OF BONDS—1949					$2,335.00

Respectfully submitted,
A. S. Brunk, M.D., *Treasurer*

ERNST & ERNST REPORT

We have examined the balance sheet of Michigan State Medical Society as of December 23, 1949, and the related statements of income and expense, surplus, and changes in reserves for the period from December 25, 1948, to December 23, 1949. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying balance sheet and statements of income and expense and changes in reserves present fairly the financial position of Michigan State Medical Society at December 23, 1949, and its income and expense for the period from December 25, 1948, to December 23, 1949, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding fiscal period.

ERNST & ERNST
Certified Public Accountants

January 10, 1950

BALANCE SHEET

December 23, 1949

ASSETS

Cash		
Demand deposits	$55,630.24	
Office cash fund	22.50	
Savings deposits	15,000.00	$ 70,652.74
Accounts Receivable		
Advertising	$ 3,595.69	
Space at 1950 Postgraduate Clinical Institute	5,570.00	
	$ 9,165.69	
Less allowance for losses in collection	100.00	9,065.69
United States Government Securities—at cost (aggregate market or redemption price $85,969.00)—Note A		89,273.22
		$168,991.65

LIABILITIES

Accounts Payable		
Current expenses and miscellaneous liabilities	$ 4,252.45	
Pay roll taxes	364.56	$ 4,617.01
Unearned Income		
Sales of space for 1950 Postgraduate Clinical Institute		8,790.00
Reserves—for unexpended funds received for special purposes		
Public Education Program:		
General activities	$35,238.62	
Special activity	33,254.46	$68,493.08
Rheumatic Fever Control Program	28,887.97	
Lecture grant	400.00	97,781.05
Surplus		
Balance at December 25, 1948	$71,963.49	
Net expenses for the period from December 25, 1948, to December 23, 1949	14,159.90	57,803.59
		$168,991.65

Note A—United States Government bonds in the amount of $30,000.00 have been designated as applicable to the reserve for Public Education Program.

INCOME AND EXPENSE STATEMENT

From December 25, 1948, to December 23, 1949

Income:		
Membership fees	$55,980.00	
Less portion allocated to income of "The Journal" for subscriptions	6,997.50	$ 48,982.50
Income from "The Journal"		5,995.14
Interest:		
On securities	$ 2,569.20	
On savings deposits	426.90	2,996.10
Gain on disposal of bonds		869.06
Miscellaneous income		282.96
TOTAL INCOME		$ 59,125.76
Expenses:		
Administrative and general	$35,980.10	
Society activities	15,314.86	
Annual and special sessions	437.48	
Committee expenses	21,553.22	73,285.66
NET EXPENSES		$ 14,159.90

Comments

The Michigan State Medical Society was organized on September 17, 1910, under the laws of the State of Michigan as a non-profit corporation. The charter has been extended for a period of thirty years from September 17, 1940. The Society is affiliated with the American Medical Association and it charters county medical societies within the State of Michigan. The purposes of the Society are the promotion of the science and art of medicine, the protection of the public health and the betterment of the medical profession. In the furtherance of these purposes, the Society publishes "The Journal of the Michigan State Medical Society".

The balance sheets at December 23, 1949, are summarized as follows:

ASSETS

December 23, 1949

Cash	$ 70,652.74
Accounts receivable	9,065.69
Securities	89,273.22
	$168,991.65

LIABILITIES

Accounts payable	$ 4,617.01
Unearned income	8,790.00
Reserves for unexpended funds received for special purposes	97,781.05
Surplus	57,803.59
	$168,991.65

Schedules included hereinafter show in greater detail the income from "The Journal" and the expenses of the Society in comparison with the respective budgets. "The Journal", as in prior years, has been allotted $1.50 from each membership fee.

Accounts receivable for advertising were classified as to period of charge and are summarized as follows:

PERIOD OF CHARGE

	December 23—1949 Amount	Per Cent
October, November, and December	$3,341.43	92.93%
July, August, and September	91.70	2.55
January to June, inclusive	162.56	4.52
TOTAL	$3,595.69	100.00%

Our examination of accounts receivable as of December 23, 1949, included tests of the balances by communication with selected debtors. It is our opinion the allowance of $100.00 is a reasonable provision for losses in collection of the accounts.

The changes in bonds owned during the period were as follows:

Balance at December 25, 1948		$89,476.60
ADDITIONS		
Purchase of United States Savings Bonds, Series F, maturing December 1, 1961	$9,176.00	
Increase in redemption value of United States Savings Bonds acquired in prior years	$122.20	
Less amortization of bond premium	12.83	109.37
		9,285.37
		$98,761.97
DEDUCTIONS		
Bonds sold and matured:		
Canadian Pacific Railway Company, 4%, perpetual	$1,855.00	
Detroit Edison Company, 3½%, maturing September 1, 1966	2,187.50	
Grand Rapids Affiliated Corporation, 5%, maturing October 1, 1955	1,650.00	
New York Central Railroad Company, 4%, maturing February 1, 1998	1,173.75	
Southern Pacific Company, 4½%, maturing March 1, 1977	1,322.50	
United States Savings Bonds, Series D, matured April 1, 1949	1,300.00	9,488.75
Balance at December 23, 1949, (of which bonds in the amount of $30,000.00 have been designated for the Public Education Program)		$89,273.22

Bonds owned at December 23, 1949, have been stated at cost adjusted for increases in redemption price of United States Savings Bonds, Series F, and less amortization of bond premium. The bonds were confirmed by direct correspondence with the bank in which they are held for safekeeping, and we accounted for income from the bonds for the period. At December 23, 1949, the aggregate carrying amount of the bonds owned was $3,304.22 greater than the aggregate market or redemption prices. Details of the bonds are shown in a schedule in this report.

During the period the Society received $101,125.00 from county medical societies representing collections of assessments levied by the American Medical Association on its members. All such collections were remitted to the American Medical Association, and the amounts do not appear in the Society's financial statements.

EXPENSES

From December 25, 1948, to December 23, 1949

Administrative and general:	
Salaries—administrative	$ 7,000.01
Salaries—office	6,832.95
General counsel	4,440.07
Other legal expense	1,019.34
Office rent and light	1,537.20
Printing, stationery, and supplies	2,360.11
Postage	1,336.23
Insurance and fidelity bonds	3,757.05
Audit	735.00
New equipment and repairs	1,200.02
Telephone and telegraph	2,828.96
Pay roll taxes	2,066.27
Miscellaneous	866.89
TOTAL	$35,980.10
Society activities:	
Council expense	$ 6,860.85
Delegates to American Medical Association	1,170.97
General society travel	2,433.92
Officers' travel expense	3,031.06
National conference on medical service	90.07
Secretary's letter	1,190.62
Women's Auxiliary—annual meeting	300.00
Sundry society expense	237.37
TOTAL	$15,314.86
Annual and special sessions:	
Annual session:	
Scientific meeting	$ 2,969.93
Exhibit	4,429.19
Housing committee	1.86
Lantern slides	75.93
Officers' night and Biddle oration	136.85
Press	459.39
Printing, mailing, and postage	2,155.54
Registration	289.40
Salaries	4,863.34
State society night	640.00
Scientific work committee	188.87
Hotel expense	522.11
Speakers' conference	629.85
House of Delegates expense	1,339.89
Miscellaneous	319.62
TOTAL	$19,021 77
Postgraduate clinical expenses:	
Salaries	$ 2,011.75
Scientific meeting	2,151.01
Committee meetings	495.93
Printing	1,598.02
Mailing and postage	97.26
Exhibits	1,647.43
Press	727.59
Registration	162.72
Question box expense	66.26
Hotel expense	413.18
Housing committee expense	28.33
Miscellaneous	891.23
	$10,290.71
	$29,312.48
Less sales of display space:	
Annual session	$20,495.00
Postgraduate Clinical Institute	8,380.00
	$28,875.00
NET TOTAL	$ 437.48
Committee expenses:	
Cancer	$ 5,000.00
Child welfare	148.72
Legislative	2,133.23
Postgraduate medical education	3,442.91
Preventive medicine	77.58
Geriatrics	168.04
Industrial hygiene	61.35
Maternal health	285.08
Mental hygiene	201.31
Scientific radio	17.55
Venereal disease control	147.07
Tuberculosis control	152.97
Michigan Health Council	7,500.00
Sundry other	2,217.41
TOTAL	$21,553.22

THE JOURNAL

From December 25, 1948, to December 23, 1949

Income:	
Subscriptions from members	$ 6,997.50
Other subscriptions	435.37
Advertising sales	47,293.52
Reprint sales and cuts	3,491.18
	$58,217.57
Expenses:	
Salaries	$ 8,299.96
Editor's expense	1,800.00
Printing and mailing	28,856.22
Cost of reprints and cuts	2,868.63
Discounts and commissions on advertising sales	10,240.09
Miscellaneous	157.53
	$52,222.43
NET INCOME	$ 5,995.14

PUBLIC RELATIONS PROGRAM

From December 25, 1948, to December 23, 1949

Income from assessment of members	$116,625.00
EXPENSES	
Salaries	$17,067.11
Rent and light	473.40
Telephone and telegraph	2,145.12
Printing, stationery, and supplies	1,412.67
Postage	982.56
Office equipment and repairs	366.04
Travel	2,208.56
Public relations and secretaries' conferences	2,748.85
Publications and pamphlets	517.44
Committee meetings	654.13
Newspaper advertising	7,615.21
Radio programs	27,820.76
School programs and libraries	2.50
Cinema	15,243.04
Rural health conference	685.18
Clipping service	262.05
Miscellaneous	1,181.76
TOTAL EXPENSES	$81,386.38

PUBLIC EDUCATION RESERVE ACCOUNT

From December 25, 1948, to December 23, 1949

Salaries	$30,056.23
Printing, stationery, and supplies	11,676.61
Postage	573.61
Telephone and telegraph	1,946.70
Travel	10,566.53
Office equipment	256.58
Publications and pamphlets	7,837.91
Meeting expenses:	
Special committee on education	609.66
Field secretaries	832.66
County societies and other meetings	2,276.70
Cinema, radio, and newspaper programs	25.00
Miscellaneous	87.35
TOTAL	$66,745.54

CASH

December 23, 1949

Demand deposits:		
Michigan National Bank, Lansing—general account	$50,502.11	
The Detroit Bank—Treasurer's account	5,128.13	$55,630.24
Office change fund		22.50
Savings deposits:		
The Detroit Bank	$ 5,000.00	
The Manufacturers National Bank of Detroit	5,000.00	
Wabeek State Bank of Detroit	5,000.00	15,000.00
TOTAL		$70,652.74

RHEUMATIC FEVER CONTROL PROGRAM

From December 25, 1948, to December 23, 1949

INCOME

Grant from Michigan Society for Crippled Children and Adults, Inc.	$ 6,000.00
Grant from Michigan Heart Association	32,515.72
Grant from Michigan Chapter—Arthritis and Rheumatism Foundation	2,250.00
TOTAL INCOME	$40,765.72

EXPENSES

Expenses of central office:		
Salaries—administrative	$ 8,000.00	
Salaries—general	599.99	
Committee meetings	799.36	
Pay roll taxes	180.60	
Publications and pamphlets	324.51	
Travel	707.49	
Printing, stationery, and supplies	152.21	
Postage	10.61	
Miscellaneous	104.59	
		$10,879.36
Expenses of local consultation and diagnostic centers—advances and expenses:		
Ann Arbor	$ 9.29	
Bay City	1,000.00	
Detroit	3,048.81	
Grand Rapids	2,711.28	
Jackson		
Kalamazoo	1,000.00	
Lansing	608.79	
Marquette	1,500.00	
Muskegon (expense incl. with Gd. Rapids)		
Saginaw	200.00	
Traverse City	1,004.50	
		$11,082.67
TOTAL EXPENSES		$21,962.03

SECURITIES—December 23, 1949

Description	Interest Rate	Maturity	Interest Paid to	Principal Amount	Cost	Market or Redemption Prices 12-23-49	Market or Redemption Prices 12-24-48	Income For Period
Bonds held for general purposes:								
United States Savings Bond, Series G	2½%	6- 1-56	12- 1-49	$ 5,000.00	$ 5,000.00	$ 4,760.00	$ 4,735.00	$ 125.00
United States Savings Bonds, Series G	2½%	2- 1-57	8- 1-49	17,600.00	17,600.00	16,667.20	16,684.00	440.00
United States Savings Bond, Series G	2½%	6- 1-57	12- 1-49	5,000.00	5,000.00	4,735.00	4,740.00	125.00
United States Savings Bond, Series G	2½%	12- 1-57	12- 1-49	1,000.00	1,000.00	947.00	956.00	25.00
United States Savings Bonds, Series G	2½%	5- 1-58	11- 1-49	5,000.00	5,000.00	4,740.00	4,780.00	125.00
United States Savings Bonds, Series G	2½%	3- 1-60	9- 1-49	5,000.00	5,000.00	4,845.00	4,940.00	125.00
United States Savings Bonds, Series F	Note A	5- 1-53		2,500.00	2,217.50	2,217.50	2,152.50	65.00
United States Savings Bonds, Series F	Note A	7- 1-53		700.00	611.80	611.80	593.60	18.20
United States Savings Bonds, Series F	Note A	9- 1-53		500.00	437.00	437.00	424.00	13.00
United States Savings Bonds, Series F	Note A	12- 1-61		12,400.00	9,176.00	9,176.00	Note B	
United States Treasury Bonds	2½%	12-15-72/67	12-15-49	8,000.00	8,230.92	8,302.50	8,040.00	187.17-C
Bonds held for Public Education Program:								
United States Savings Bonds, Series G	2½%	8- 1-58	8- 1-49	30,000.00	30,000.00	28,530.00	28,860.00	750.00
Bonds sold and redeemed during period:								26.00
United States Savings Bonds, Series D								114.89
Canadian Pacific Railway Company								88.86
Detroit Edison Company								118.61
Grand Rapids Affiliated Corporation								108.22
New York Central Railroad Company								114.25
Southern Pacific Company								
		TOTAL		$92,700.00	$89,273.24	$85,969.00		$ 2,569.20

Note A—Bonds purchased on a discount basis. The amounts shown as cost of these bonds are the redemption values at December 23, 1949, and the amount of income shown for the period is the increase in redemption value over that at December 24, 1948.

Note B—Bonds purchased in 1949.

Note C—Interest income after amortization of premium paid on purchase.

MSMS BUDGETS—1950

GENERAL FUND

INCOME

4400 Members @ $12 Dues	$ 52,800.00	
Less Allocation to Jrnl. @ $1.50	6,600.00	
	$46,200.00	
Income from The JOURNAL		
Interest Income	2,500.00	
Miscellaneous Income	100.00	
TOTAL INCOME	$ 48,800.00	
Allocated from 1950 Assessment (4400 members @ $5.00)	22,000.00	
Deficit—1950	5,525.00	
	$ 76,325.00	

APPROPRIATIONS

Administrative & General:

Office Rent & Light	$ 1,600.00
Printing	1,200.00
Stationery & Supplies	1,200.00
Postage	1,500.00
Insurance & Fidelity Bonds	3,800.00
Auditing	735.00
Administrative Salaries	7,000.00
Office & General Salaries	8,940.00
General Counsel	3,600.00
General Counsel Expense	1,000.00
New Equipment & Repairs	2,500.00
Telephone & Telegraph	2,700.00
Payroll Taxes	2,100.00
Miscellaneous General Expense	600.00
	$ 38,475

Society Activity:

Council Expense	$ 7,000.00
Delegates to AMA	3,400.00
General Society Travel	2,500.00
Officers' Travel	3,000.00
National Conference on Med. Service	250.00
Secretary's Letters	1,200.00
Woman's Auxiliary—Annual Meeting	300.00
Sundry Society Expense	300.00
	$ 17,950.00

TOTAL SOCIETY EXPENSE

Committee Expense:

Legislative Committee	$ 1,500.00
Distribution of Medical Care	50.00
P.G. Medical Education	5,000.00
Preventive Medicine	100.00
Cancer Control	1,000.00
Child Welfare	150.00
Geriatrics	200.00
Industrial Health	600.00
Maternal Health	700.00
Mental Hygiene	200.00
Scientific Radio	50.00
Venereal Disease Control	200.00
Tuberculosis Control	150.00
Ethics	
Scientific Work	
Michigan Health Council	7,500.00
Sundry Other Committees	2,500.00
	$ 19,900.00
GRAND TOTAL (Expenses)	$ 76,325.00

PUBLIC EDUCATION RESERVE ACCOUNT

INCOME

Cash on Hand 12/24/49 (includes $30,000 in bonds)	$ 33,254.46
From Assessment—1950	15,645.54
	$ 48,900.00

EXPENSES

Salaries	$ 26,600.00
Printing	1,000.00
Stationery & supplies	600.00
Postage	500.00
Telephone & Telegraph	1,000.00
Travel	10,000.00
Office Equipment	100.00
Publications & Pamphlets	5,000.00
Meeting Expense	
Special Comm. on Education	500.00
Field Secretaries	600.00
Co. Society & Other Meetings	2,500.00
Miscellaneous	500.00
TOTAL EXPENSES	$ 48,900.00

PUBLIC RELATIONS PROGRAM

INCOME

Cash on Hand 12/24/49	$ 35,238.62
Allocated from Assessment 1950 (4400 members @ $20.00)	88,000.00
TOTAL AVAILABLE	$123,238.62

EXPENSES

Clipping Service	$ 300.00
Committee Meeting Expense	600.00
New Equipment & Repairs	200.00
Postage	1,000.00
Printing	800.00
Stationery & Supplies	200.00
Office Rent & Light	500.00
Salaries	17,440.00
Telephone & Telegraph	2,100.00
Travel Expense	2,200.00
Cinema	5,000.00
Display Advertising	200.00
Newspaper Advertising	2,500.00
Publications & Pamphlets	1,000.00
Radio "Tell Me, Doctor" Programs	19,000.00
Schools—Sex Education and Libraries	100.00
National Meeting Expense	200.00
Annual County Secretaries—Public Relations Conference	3,000.00
Misc. General Expense	500.00
Rural Health Conference	500.00
TOTAL	$ 57,340.00
To P.E. Reserve Program 1950	15,645.54
TOTAL EXPENSES	$ 72,985.54
Balance to 1951—includes $30,000 in Bonds	$ 50,253.08

THE JOURNAL

INCOME

Subscriptions (4400 @ $1.50)	$6,600.00
Other Subscriptions	400.00
Advertising Sales	45,160.00
Reprint and Cut Sales	3,000.00
TOTAL INCOME	$ 55,160.00

EXPENSES

Printing and Mailing	$30,000.00
Reprint & Cut Expense	2,600.00
Disc. & Comm. on Adv. Sales	10,250.00
Salaries	10,310.00
Editor's Expense	1,800.00
Misc. JOURNAL Exp.	200.00
TOTAL EXPENSES	$ 55,160.00

RHEUMATIC FEVER CONTROL PROGRAM

INCOME

Balance on hand Dec. 24, 1949	$ 28,887.97
Contribution of Mich. Heart Ass'n—1950	23,246.31
Contribution of Arthritis & Rheumatism Foundation	2,250.00
Contribution of Michigan Society for Crippled Children & Adults, Inc.	6,000.00
	$60,384.28

EXPENSES

Central Office (Lansing)	
Travel	$ 1,000.00
Equipment & Supplies	1,000.00
Printing, Stationery & supplies	300.00
Postage	200.00
Payroll Taxes	200.00
Committee Meetings	1,200.00
Educational Conferences	3,000.00
Publications & Pamphlets	2,500.00
Miscellaneous Expense (Exhibit)	500.00
Salaries—Administrative	8,000.00
Salaries—General Office (2 persons)	1,500.00
Public Field Worker	4,800.00
	$24,200.00

EXPENSES OF CENTERS

Alpena	$ 500.00
Ann Arbor	200.00
Battle Creek	500.00
Bay City	1,200.00
Flint	500.00
Grand Rapids	1,750.00
Jackson	200.00
Kalamazoo	1,000.00
Lansing (incl. $300 salary)	800.00
Marquette	2,000.00
Muskegon	1,750.00
Pontiac	500.00
Port Huron	500.00
Saginaw	700.00
St. Joseph—Benton Harbor	500.00
Traverse City	1,500.00
Detroit (Wayne Co.—16 Centers)	4,000.00
Emergency	2,000.00
	$ 20,100.00
Balance to 1951	16,084.28
	$60,384.28

1950 ANNUAL SESSION

INCOME

Booth Sales	$ 15,990.00

EXPENSES

Scientific Meeting Expense	$ 3,000.00
Registration Expense (Incl. Badges)	300.00
Exhibit Expense (99 Booths)	4,140.00
Hotel Expense	500.00
Officer's Night & Biddle Oration	200.00
State Society Night Expense	600.00
Printing (Incl. Advance & Final Program) & Mailing & Postage	1,600.00
Press	400.00
Projection Expense	200.00
Committee on Scientific Work	100.00
Salaries	3,750.00
Luncheon Expense for Guest Speakers	100.00
House of Delegates (See Below)	800.00
Miscellaneous Expense	300.00
TOTAL EXPENSES	$15,990.00

HOUSE OF DELEGATES BUDGET

EXPENSE

Printing of Handbook	$ 330.00
Reporting of Proceedings	220.00
Reprints of Proceedings	150.00
Miscellaneous Expense	100.00
Total Expenses	$ 800.00

1950 MICHIGAN POSTGRADUATE CLINICAL INSTITUTE

INCOME

Booth Sales	$ 8,920.00

EXPENSES

Scientific Meeting (Incl. Projection Exp.)	2,100.00
Committee Meetings	340.00
Printing (Incl. Advance & Final Program) & Mailing & Postage	1,700.00
Exhibit Expense (53 booths)	1,600.00
Press	400.00
Registration Expense (Incl. Badges)	150.00
Miscellaneous Expense (Incl. Housing Committee)	150.00
Hotel Expense	330.00
Salaries	2,150.00
TOTAL EXPENSES	$ 8,920.00

Let me assure you that there is nothing in the recent history of the Social Security Board or the Federal Security Administration to suggest that the proposed new program of socialized medicine would be administered in a manner different in any way from the standard pattern of bureaucratic operations—forms, paper work, regimentation, shocking inefficiency, and scandalous waste.—L. C. Arends, M.C., Illinois.

A large benign chronic ulcer with steep side walls as seen in barium-filled shadow on the lesser curvature of the stomach.

When your patient is on a special diet, as in the management of peptic ulcer, gallbladder disease, obesity, etc., there may be insufficient fecal bulk for encouraging the normal peristaltic reflex.

METAMUCIL® is the highly refined mucilloid of a seed of the psyllium group, Plantago ovata (50%), combined with dextrose (50%).

ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

SEARLE RESEARCH IN THE SERVICE OF MEDICINE

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

PROVISIONAL REPORT ON 1949 POLIOMYELITIS CASES IN MICHIGAN

Although the number of cases of poliomyelitis reported in 1949 greatly exceeded that of any other year, an analysis of the provisional data available at this time indicates that the outbreak followed approximately the same pattern that poliomyelitis has followed in Michigan in the past ten years.

The provisional total for 1949 was 2,896 cases which is considerably more than double the previous high which occurred in 1940 when 1,226 cases were reported.

Analyzing the data from the point of view of age indicates that approximately 60 per cent of the cases were under twelve years of age; approximately 70 per cent were under fifteen years, and the balance were over age fifteen. Cases occurred at practically all ages from under age one through age sixty-eight, the oldest case being sixty-eight years of age. The greatest number of cases occurred at age two.

One peculiarity of the outbreak was that the sharp increase which was expected in late June or early July started three weeks early. However, the peak week was also three weeks earlier so that the period of high incidence was of the same duration as in previous years. The week of greatest incidence was the thirty-third week which was the week ending August 20.

With reference to severity, the 2,896 cases were distributed as follows: 1,062 had demonstrable paralysis, 1,616 cases occurred in which actual paralysis was never demonstrated. There were eighty-three bulbar type cases and 135 on which sufficient data is not yet available to classify them.

The overall case fatality rate based again on provisional figures will probably be seven. Since the normal range of the case fatality rate for poliomyelitis is from five to twenty-five, this places 1949 in the low bracket for case fatality.

California, New York and Michigan, the states hardest hit by poliomyelitis, are the states which have had the greatest population increases in the past decade and thus the greatest increase in number of susceptibles.

NITRATES IN WATER

Examination in the Michigan Department of Health Laboratories of 2,874 samples of drinking water, submitted from the eastern part of the lower peninsula for bacteriological examination, revealed that 7 per cent of them contained more than ten parts per million of nitrates. It is generally accepted that ten or more parts per million may be toxic to infants when consumed by the expectant or nursing mother or in the baby's formula. In some cases, this concentration of nitrates causes methemoglobinemia or cyanosis—"blue babies."

More than 85 per cent of the high nitrate waters were from dug wells or wells less than 50 feet deep. Only three municipal supplies were among those which showed indications of high nitrates. The municipalities have been advised and further study is being made of municipal supplies. The study covered samples submitted during the first four months of 1949.

This Department considers it advisable that private water supplies, where they consist of the dug type or shallow well, be examined for nitrates in addition to bacteria when such supplies are to be consumed by nursing or expectant mothers or by newborn infants.

Specimens will be examined in the Lansing Laboratories of the Department when submitted by attending physicians. Samples for nitrate determinations should be submitted in regular "partial chemical" sample bottles. These bottles are available from the local health departments, the Upper Peninsula Office of the Michigan Department of Health in Escanaba, the Houghton, Powers or Grand Rapids branch laboratories or from the Michigan Department of Health, Lansing.

DENTAL HYGIENE

Benefits which an educational and remedial school dental program can accomplish in less than one generation's time, have been revealed in St. Joseph, Michigan.

A dental program was initiated in the schools of St. Joseph in 1927. Since that time there has been: (1) considerable improvement in the dental health of the school children; (2) an increase in the number of private practitioners who will take child patients; (3) an increase in the amount of children's dentistry done by private dentists; and as a result (4) a decrease in the number of children who require services of the school dentist.

A dental survey of 1,202 children in January, 1930, showed that 77.39 per cent of them needed dental attention. A dental survey of 2,295 children in 1941 showed that 41 per cent of them had "100 per cent teeth." By the fall of 1948 when another survey was conducted, 55 per cent of the children had "100 per cent teeth." The percentage has continued to improve although the school population has doubled in the two decades.

The services rendered children by private dentists has reduced the amount of work of the school dentist to a point where he averages only about one day a week in St. Joseph.

Winston M. Decker, D.V.M., a graduate of Michigan State College in the class of 1946, has joined the staff of the Division of Engineering as food and milk consultant. Dr. Decker previously was employed by the Kalamazoo City-County Health Department.

* * *

Because of the increasing number of requests from individuals and small non-professional groups to visit the Laboratories of the Michigan Department of Health, a

time has been set aside for tours—at 2 p.m. on the fourth Wednesday of each month. Persons over sixteen years of age who wish to make the tour should be in the lobby of the C. C. Young Diagnostic Laboratory Building at the time the tour is scheduled.

* * *

Films and film strips on cancer, heart disease, diabetes, tuberculosis, rheumatic fever, prenatal care, physical therapy and about fifty other health topics are among the 180 listed in the new 1950 catalog of the Michigan Department of Health Film Loan Library. The films may be borrowed without charge for showing to either lay or professional groups. The new catalog, information on the use of films and the method of distribution may be obtained by writing to the Visual Education Service, Michigan Department of Health.

* * *

Called to investigate an incident where nine industrial employes were overcome at their work, the Division of Industrial Health found that a negative pressure created by large fans blowing out paint spray, caused carbon monoxide fumes from heaters usually exhausted out of the building to be drawn back into the working area.

* * *

Four mobile chest x-ray units of the Michigan Department of Health were assigned to Calhoun county March 15 for the second of two pilot studies to determine the feasibility of mass, community-wide attack in tuberculosis case-finding in comparison with the long-term selected group surveys which have been the rule in recent years.

Effort will be made to x-ray the chests of more than 80,000 adults in the county with the four units plus one Calhoun county mobile unit. The Michigan Tuberculosis Association is assisting with promotion and publicity.

The first of the two pilot studies was made in Houghton county which has a high tuberculosis death rate in a small rural population. Calhoun county is being used for the second study because, while it has a lower tuberculosis death rate, it includes metropolitan areas with concentrated population.

When this second study is complete the Department will have information on which to determine future policies regarding the use of its units in tuberculosis case-finding in the state.

* * *

Margaret Shetland, Associate Chief of the Public Health Nursing Section, is teaching a University of Michigan extension course in public health nursing supervision in Kalamazoo.

* * *

Michigan's local water works and sewage works men and health department sanitarians are getting the latest information in water and sewage works operation in four extension courses being given in various sections of the state for the fifth consecutive year.

The courses are sponsored jointly by the Education Committee of the Michigan Section, American Water Works Association, the University of Michigan, the State

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Board of Control for Vocational Education, Michigan State College and the Michigan Department of Health.

There will be an advanced course in "Fresh Water Biology" at the University of Michigan, Ann Arbor; "Problems in Water Supply Engineering" in Detroit; "Chemistry Applied to Water Purification" in Saginaw; and "Water and Sewage Bacteriology" in Jackson.

* * *

Dr. J. T. Tripp, Associate Director of the Division of Laboratories, has been named to the advisory committee on Serum Albumin and Dr. H. D. Anderson, Assistant Director of the Division of Laboratories, to a similar committee on Serum Gamma Globulin for the Commission Plasma Fractionation and Related Processes of Harvard University.

* * *

Public health people from six foreign countries arrived in the Michigan Department of Health during January for observation or study.

They included Mr. and Mrs. Karles Talberg of Latvia and Dr. Edith Taylor of Connaught Laboratories, Toronto, Canada, who visited the Grand Rapids branch laboratories; Barkat Narain, M.D., Director of Health Services, Delhi, India; Rogelio N. Relova, M.D., and H. A. Ylagan of the Philippines; Chryssa Kritikos of Athens, Greece; Doon Bunnag of Bangkok, Thailand; and Kenneth McLeod of Prince Edward Island, Canada, who visited the Department in Lansing.

* * *

A new Section of Recruitment and Training has been organized in the Division of Local Health Administration. Duties of the section will include co-ordination of existing training programs for public health personnel, development of new training facilities, recruitment of qualified personnel for public health work, and interesting more high school and college students in training for public health professions.

Roy Manty, who has been with the Michigan Tuberculosis Association, has been employed as public health training administrator to head the new section.

* * *

The boards of supervisors of Wexford, Missaukee, Roscommon, Crawford, and Kalkaska counties by unanimous action created a five-county health district effective February 1, 1950. Wexford has had a single county health department for the past twenty-two years. The other counties had a four-county district health department.

Clifford Merritt, M.D., is the Director of the five-county health department. Main offices will be in Lake City with subsidiary offices in Cadillac.

Federal taxes are already seven times the pre-war figure, while state and local taxes have nearly doubled. . . . At a $5,000 wage, a family man pays $432 as against $48 in 1939. . . . Corporations pay $10.4 billions against $1.5 billions before the war; individuals pay $18.8 billions, against $2.4 billions.—*Detroit Free Press.*

In Memoriam

William Edward Alleger, M.D., of Pittsford, Michigan, was born April 29, 1877, in Ransom Township and was graduated from the Detroit Homeopathic College in 1909. He was a past president of the Hillsdale County Medical Society and a former member of the Michigan State Medical Society and the American Medical Association. Doctor Alleger had practiced medicine in Pittsford for forty years and died on December 4, 1949, at the age of seventy-two years.

George Adam Drescher, M.D., Lewiston, Michigan, was born October 23, 1887, in Kawkawlin, Michigan, and graduated from the Detroit College of Medicine in 1915. He was a member of the North Central County Medical Society, the Michigan State Medical Society and the American Medical Association. Dr. Drescher died on December 16, 1948, in Lewiston, Michigan, at the age of sixty-one years.

Edward Otto Foss, M.D., of Muskegon, Michigan, was born August 4, 1881, and was graduated from the Hahnemann Medical College and Hospital, Chicago, in 1906. He was a member of the Muskegon County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor Foss died January 8, 1950, in Muskegon, Michigan, at the age of sixty-eight years.

Frederick Norman Morford, M.D., of Muskegon, Michigan, was born December 17, 1892, in Evart, Michigan, and was graduated from the Wayne University College of Medicine in 1916. He served with the Army Medical Corps during World War I, was president of the Muskegon County Medical Society in 1929, was a member of the Michigan State Medical Society and the American Medical Association. Doctor Morford died September 12, 1949, in Muskegon at the age of fifty-seven years.

Arthur Joseph Neumann, M.D., of Grosse Pointe, Michigan, was born in 1891 and was graduated from the Chicago College of Medicine and Surgery in 1917. He was a member of the Wayne County Medical Society, the Michigan State Medical Society, the American Medical Association, and an Associate Fellow of the International College of Surgeons. Doctor Neumann died at the age of fifty-eight in Detroit on November 28, 1949.

James Timothy O'Hora, M.D., of Detroit, Michigan, was born in Mazomaine, Wisconsin, in 1895, and was graduated from Rush Medical College in 1926. He served with the U. S. Army during World War I, was a member of the Wayne County Medical Society, the Michigan State Medical Society, the American Medical Association, the American Board of Otolaryngology and the American Academy of Ophthalmology. He was Chief of the ear, nose and throat staff at Woman's Hospital and was also on the staff at Children's and Henry Ford Hospitals. Doctor O'Hora died November 9, 1949, in Detroit at the age of fifty-four years.

Gertrude D. Campbell O'Sullivan, M.D., of Mason, Michigan, was born January 24, 1866, in Bradford, Pennsylvania, and was graduated from the University of Michigan Medical School in 1896. She took postgraduate studies at the Rotunda Hospital, Dublin, Ireland, the Margaret Hague Hospital, Jersey City, N. J., and the Postgraduate School in New York. She was a member of the Ingham County Medical Society, an Emeritus member of the Michigan State Medical Society and a member of the American Medical Association. For many years she served as city physician and health officer in Port Huron, Michigan, and was on the staff at Edward W. Sparrow Hospital, Lansing. Doctor O'Sullivan died on September 14, 1949, in Mason, at the age of eighty-three years.

Edward J. Panzner, M.D., of Detroit, Michigan, was born January 11, 1874, in Detroit and was graduated from the Detroit College of Medicine in 1893. He was a member of the Wayne County Medical Society, an Emeritus member of the Michigan State Medical Society, a member of the American Medical Association, a Fellow of the American College of Surgeons and of the International College of Surgeons. Doctor Panzner was Chief of the Surgical Staff at Providence Hospital for thirty-five years and was on the staff at Grace and Holy Cross Hospitals. He died October 10, 1949, in Detroit at the age of seventy-five years.

Max Minor Peet, M.D., of Ann Arbor, Michigan, was born October 20, 1885, in Iosco, Michigan, and was graduated from the University of Michigan Medical School in 1910. He was a member of the Washtenaw County Medical Society, the Michigan State Medical Society and the American Medical Association, a Fellow of the American College of Surgeons, member of the American Surgical Association, Society of Neurological Surgeons, American Neurological Association and had been a member of the International Neurological Congress in Berne, Switzerland, and in London. Doctor Peet was professor of Surgery at the University of Michigan since 1930 and was best known for his original work on splanchnic section for arterial hypertension. He expired on March 25, 1949, in Ann Arbor, Michigan, at the age of sixty-three years.

Antoine Shirley Petkus, M.D., formerly of Muskegon Heights, Michigan, was born in 1910 and was graduated from the University of Illinois College of Medicine in

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1939. She had been a member of the Muskegon County Medical Society, the Michigan State Medical Society and the American Medical Association. She had only last year moved to Fullerton, California, where she died on April 18, 1949, at the age of thirty-nine years.

Henry Michael Quinn, M.D., of Copemish, Michigan, was born in Keeseville, New York in 1882 and was graduated from the Wayne University College of Medicine in 1907. He was a member of the Manistee County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor Quinn died on July 2, 1949, in Copemish at the age of sixty-seven years.

George L. Renaud, M.D., of Detroit, Michigan, was born in Detroit on March 10, 1870, and was graduated from the Wayne University College of Medicine in 1891. He took postgraduate work in New York and Paris, was a member of the Wayne County Medical Society, an Emeritus member of the Michigan State Medical Society and a member of the American Medical Association. He was also a member of the American Academy of Ophthalmology, and the Nu Sigma Nu Medical Fraternity. Doctor Renaud was the author of many articles on hay fever and throat ailments. He died July 8, 1949, in Detroit, at the age of seventy-nine years.

Andrew C. Roche, M.D., of Calumet, Michigan, was born in Pinckney, Michigan, in 1875 and was graduated from the University of Michigan School of Medicine in 1903. He served in the Spanish American War, was president of the Houghton-Baraga-Keeweenaw County Medical Society in 1926 and served for five years on the Michigan State Board of Medical Examiners. He was also a member of the Michigan State Medical Society and the American Medical Association. Doctor Roche had practiced in Calumet since 1914 and was on the staff at Calumet Hospital. He died April 25, 1949, at the age of seventy-four years.

Thomas M. Sanford, M.D., of Lansing, Michigan, was born January 2, 1865, and was graduated from the Barnes Medical College, St. Louis, Missouri in 1894. He served as Ingham County physician for eight years, was a member of the Ingham County Medical Society, an Emeritus member of the Michigan State Medical Society and a member of the "50 Year Club" and also a member of the American Medical Association. Doctor Sanford had practiced in Lansing since 1905 and was eighty-four years of age when he died on January 30, 1949.

William F. Shannon, M.D., of Detroit, Michigan, was born in New York City in 1911 and was graduated from the University of Cincinnati College of Medicine in 1938. He served with the U. S. Army Medical Corps during World War II, was a member of the Wayne County Medical Society, the Michigan State Medical Society, the American Medical Association and the American College of Surgery. He died September 8, 1949, in Grosse Pointe Park, Michigan, at the age of thirty-eight years.

Say you saw it in the Journal of the Michigan State Medical Society

Raymond Nelson Slate, M.D., of Detroit, Michigan, was born in Colfax, Washington, in 1889, and was graduated from the University of Michigan School of Medicine in 1922. He was a member of the Wayne County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor Slate died December 28, 1949, in Detroit at the age of sixty years.

Lillian Richardson Smith, M.D., of Harwich, Cape Cod, Massachusetts, was born in Muskegon, Michigan, in 1885, and was graduated from Tufts College Medical School in 1917. She was Director of the Bureau of Maternal and Child Health of the Michigan Department of Health for twenty-two years, was a former member of the Ingham County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor Smith died April 13, 1949, in Cape Cod, Massachusetts, at the age of sixty-four years.

Leo John Stafford, M.D., of Adrian, Michigan, was born November 16, 1889, in Springville, Michigan, and was graduated from the Wayne University College of Medicine in 1911. He served as a Captain in the Medical Corps during World War I, was a member of the Lenawee County Medical Society, the Michigan State Medical Society, the American Medical Association and the Nu Sigma Nu medical fraternity. He had practiced in Adrian since 1913 and was Chief of Staff at Bixby Hospital. Doctor Stafford died July 26, 1949, at the age of fifty-nine years.

Jacob Talso, M.D., of Ishpeming, Michigan, was born September 9, 1872, in Laihia, Finland. He came to the United States in 1896 and was graduated from the Chicago College of medicine and surgery in 1910. He was a member of the Marquette-Alger County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor Talso had practiced in Ishpeming since 1921 and was owner and operator of the Grace Hospital there. He died May 30, 1949, at the age of seventy-seven years.

Pius Lee Thompson, M.D., of Grand Rapids, Michigan, was born in 1878 and graduated from the University of Michigan Medical School in 1903. He studied surgery for two years in Germany, and practiced surgery at St. Mary's Hospital in Grand Rapids for thirty-three years. Dr. Thompson was president of the Kent County Medical Society in 1941, a member of the American Medical Association and the Michigan State Medical Society. Dr. Thompson died on January 18, 1949, while visiting relatives in Gulfport, Mississippi. He was seventy-one years of age.

Franklin Reuben Walters, M.D., of Battle Creek, Michigan, was born in Chagrin Falls, Ohio, in 1881, and was graduated from the University of Wooster, Medical Department, Cleveland, in 1905. He took postgraduate studies in Vienna, was a member of the Calhoun County Medical Society, the Michigan State Medical Society, the American Medical Association and a Fellow of the American College of Surgeons. Doctor Walters operated the

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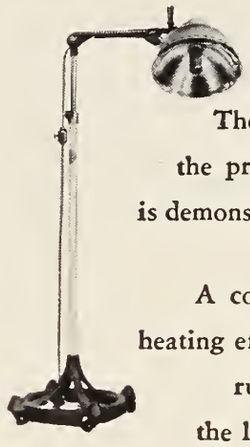

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1	7.35	4.40	3.10	0.80	0.25
2	5.35	4.00	2.40	0.70	0.21

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*Arch. Physical Medicine, 30:691-99 (November) '49.

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Community Hospital at Moose Lake, Minnesota, for twenty years and was at the time of his death Industrial Surgeon of the W. K. Kellogg Company. He died October 22, 1949, in Battle Creek at the age of sixty-eight years.

Frank Dudley B. Waltz, M.D., of Detroit, Michigan, was born in 1878 and was graduated from the Wayne University College of Medicine in 1903. He was a member of the Wayne County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor Waltz had practiced in Detroit since 1912 and was seventy-one years of age at the time of his death on November 14, 1949.

George Waters, M.D., of Purt Huron, Michigan, was born February 20, 1874, in Park Hill, Ontario. He was graduated from the Wayne University College of Medicine in 1903 and served as a Major in the Medical Corps during World War I. He was President of the St. Clair County Medical Society in 1935, was a member of the Michigan State Medical Society and the American Medical Association. He was also a member of the Michigan Tuberculosis Association and the American Trudeau Society. Doctor Waters had practiced in Port Huron for twenty-nine years and was a member of the Board of Education there. He died July 4, 1949, at the age of seventy-five years.

Llewellyn G. Wedgwood, M.D., of Grandville, Michigan, was born June 26, 1873, and was graduated from the Wayne University School of Medicine in 1899. He was a member of the Kent County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor Wedgwood died December 5, 1949, in Grand Rapids, Michigan, at the age of seventy-six years.

Norman Lee Woodry, M.D., of Detroit, Michigan, was born in 1890 at Imlay City, Michigan. He was graduated from the Wayne University College of Medicine in 1913, was a member of the Wayne County Medical Society, the Michigan State Medical Society and the American Medical Association. He was also a member of the Detroit Ophthalmological Society, the Detroit Otolaryngological Society and the American Academy of Ophthalmology. He was on the Staff at Harper, Mt.

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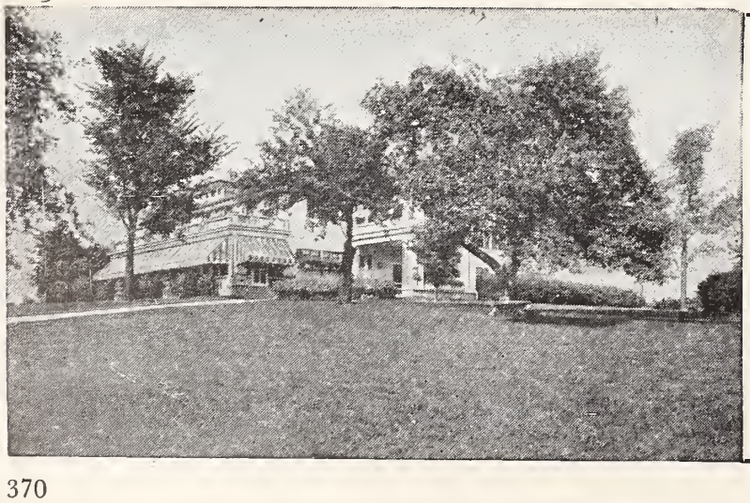

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Carmel Mercy and the Florence Crittenden Hospitals. Doctor Woodry died August 6, 1949, in Detroit at the age of fifty-nine years.

August Karl Zinn, M.D., of Ypsilanti, Michigan, was born October 29, 1901, in Galesburg, Michigan, and was graduated from the University of Michigan Medical School in 1925. He attended the New Orleans Eye, Ear, Nose and Throat School in 1932 and served as a Captain in the Army Medical Corps during World War II. He was a member of the Washtenaw County Medical Society, the Michigan State Medical Society, the American Medical Association and the Michigan Triological Society. He had practiced in Battle Creek, Michigan, for fourteen years before moving to Ypsilanti and was on the staff at Beyer Hospital. Doctor Zinn died in Ypsilanti, Michigan, on May 15, 1949, at the age of forty-seven years.

The Surgeon General of the Army announced that one of the most detailed and comprehensive scientific treatises ever attempted, the "Atlas of Tumor Pathology," is being published by the Armed Forces Institute of Pathology for the National Research Council, which work is expected to be important in the fight against cancer. When complete the work will appear in 39 parts and will require two more years to finish publication. (From Department of the Army, Technical Information Office, release dated December 27, 1949.)

Correspondence

AMERICAN MEDICAL ASSOCIATION
Mr. William J. Burns
Lansing 8, Michigan
Dear Mr. Burns:

On January 9, 1950, an estimate was made of all monies sent in by the various state and territorial medical associations in payment of the 1949 assessment. This shows that, percentage-wise, your society stands No. 2 on the list of 53 constituent associations.

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Washington Office of A.M.A. has been moved to Room 300-312 at 1523 L Street, N.W., as of March 1.

* * *

Dr. Gordon H. Scott was named Dean of Wayne University College of Medicine by the Detroit Board of Education on January 10. Congratulations, Dean Scott!

L. Fernald Foster, M.D., Bay City, Secretary of the Michigan State Medical Society, spoke to the Grace Hospital Staff, Detroit, September 30 on "Impractices"; the Bay County Dental Society on October 3, "What Compulsory Health Insurance Means to the Public"; the Michigan Consumer Finance Association Annual Meeting, October 27, on "Socialized Medicine"; the Vassar Service and Women's Clubs on November 28, "The Welfare State and Medicine"; the Staff Meeting of Bay City General Hospital on December 8, "Medical Public Relations"; the Calhoun County Medical Society, Battle Creek, January 3, on "The Medical Profession and the Press"; the League of Catholic Women, Bay City, January 16, on "Compulsory Health Insurance"; the Bay City Rotary Club, January 31, on "Socialism vs. Americanism"; and the "Hi-12 Club" of Bay City, February 6, on "What Socialized Medicine Means to You."

* * *

E. E. Poos, M.D., Detroit, presented a paper at the Annual Meeting of the American College of Allergists in St. Louis on January 18. The title was "Mechanism of Allergy of the Eye and Its Adnexia."

George L. Waldbott, M.D., Detroit, read a paper before the Allergists entitled "Organizations of an Allergy Office."

* * *

The anesthetists of Michigan will hold a Sectional meeting in Suite 500, Book-Cadillac Hotel, Detroit, on Friday, September 22, 1950 (luncheon meeting). This meeting will be coincident with the MSMS Annual Session, September 20-21-22, 1950.

Harry C. Kurtz, M.D., Detroit, will lead a discussion entitled "Pulmonary Edema as Related to Anesthesia."

For reservations write H. J. VanBelois, M.D., 522 Medical Arts Building, Grand Rapids 2, Michigan.

Tuberculosis After Forty?

Twenty years ago 32 per cent of TB deaths in Michigan were among persons forty years of age and over. Ten years ago 48 per cent of deaths were in this age group. In 1948, it was 68 per cent. The peak of TB deaths in Michigan continues to move towards the middle and older age groups.

MICHIGAN TUBERCULOSIS ASSOCIATION

Michigan Industrial Health Day

Michigan's first Annual Industrial Health Day is scheduled for Ann Arbor on Wednesday, March 29, 9:30 a.m. to 5:00 p.m. Scientific program was printed in February Journal, Page 226.

Albert Heacock Whittaker, M.D., Detroit, president of the American Association of Industrial Physicians and Surgeons, will be honored by Michigan's industrial physicians and surgeons at a banquet at the Allenel Hotel, Ann Arbor, the evening of March 29. Following the dinner, John A. Schindler, M.D., of the Monroe Clinic, Monroe, Wisconsin, will speak on "Old Age—an American Problem."

All members of the Michigan State Medical Society are cordially invited to attend the scientific and social functions of Michigan Industrial Health Day on March 29 in Ann Arbor.

Ralph A. Johnson, M.D., and E. D. Barnett, M.D., both of Detroit, have been appointed by the Board of Trustees of the American Medical Association as members of the Correlating Committee of the Council on Medical Service.

Congratulations!

* * *

The E. R. Witwer, M.D., Memorial Lecture has been established by the staff of Bon Secours Hospital in Detroit. Dr. Witwer, long-time Councilor of the Michigan State Medical Society, was active in the development of this hospital and in organizing its Department of Roentgenology.

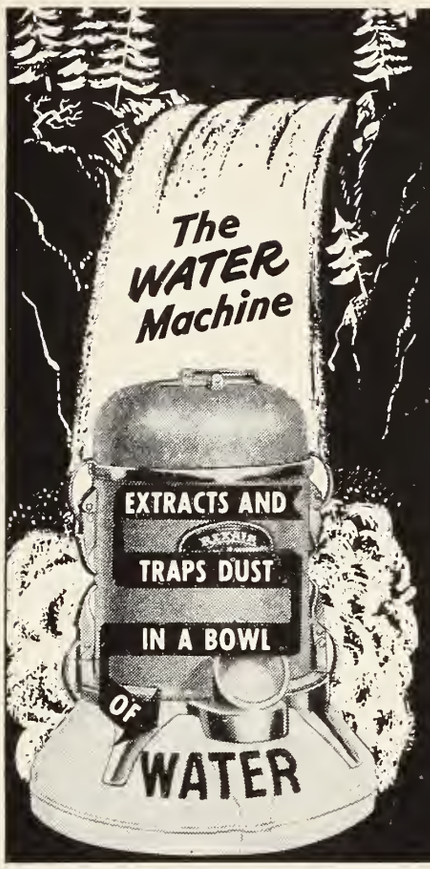
The first Witwer Memorial Lecture was given February 14 at 8:00 p.m. in the Auditorium of the Pierce Junior High School, Grosse Pointe. Kenneth Corrigan, Ph.D., Research Physicist of Harper Hospital, Detroit, was the lecturer. His subject was "Radiation in the Diagnosis and Treatment of Disease."

* * *

The National Cancer Institute (Public Health Service, Federal Security Agency) has granted $25,000 to the University of Michigan (Dr. Henry F. Vaughan) for "Instruction for the Prevention of Cancer"; and $4,590 to Wayne University College of Medicine (Dr. M. Mason Guest) for "An Investigation of the Fibrinolytic Enzyme and Inhibitor Systems in Blood and Urine and the Relationship to Cancer."

The National Cancer Institute recently made a $7,500 grant to the Detroit Institute of Cancer (William L. Simpson, M.D.) for "Mucopolysaccharides and Mucolytic Enzymes in Experimental Carcinogenesis"; and Dr. A. R. T. Denues $8,370 for "Fine Structure of Chromosomes of Normal and Malignant Cells"; Detroit Institute

(Continued on Page 374)



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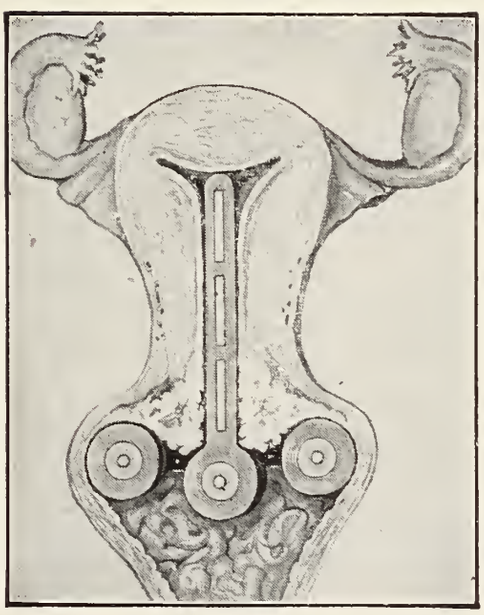

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(Continued from Page 372)

of Cancer Research $6,000 to R. M. Johnson, M.D., for "Lipid Studies in Relation to Carcinogenesis."

The National Cancer Institute also contributed $150,000 for clinical research facilities at Wayne University College of Medicine and for laboratory facilities at the Detroit Institute of Cancer Research (Drs. Gordon H. Scott and Wm. L. Simpson).

* * *

"Never! Never! Never!"—Harold E. Stassen's report on British socialized medicine in the January **Reader's Digest.** Very worthwhile reading.

* * *

Gen. Paul R. Hawley, M.D., became Director of the American College of Surgeons on March 1. Dr. Hawley resigned as Chief Executive Officer of the Blue Cross and Blue Shield Commission to become AC of S Director. Dr. Malcolm MacEachren became Director Emeritus of the AC of S and will continue to head the hospital standardization program and will assist with other special activities.

* * *

E. I. Carr, M.D., Lansing, and E. F. Sladek, M.D., Traverse City, have been appointed Regent and Vice Regent, respectively, for Michigan by Custis Lee Hall, M.D., President of the International College of Surgeons, United States Chapter.

* * *

LeRoy H. Cox, Public Relations Director of the Medical Society of the State of North Carolina, visited the Michigan State Medical Society Executive Offices the week of February 6 to observe the organizational and public relations activity of MSMS.

* * *

O. O. Beck, M.D., Birmingham, MSMS Council Chairman, spoke on "Socialized Medicine" before the Soroptimist Club in Pontiac on January 16.

* * *

Don Marshall, M.D., Kalamazoo, is author of an original article "Laceration of the Eye" which appeared in *JAMA* of January 28.

* * *

Eugene H. Payne, M.D., Detroit, is co-author of an article, "Chronic Brucellosis," which appeared in JAMA of January 21, 1950.

* * *

Wilfrid Haughey, M.D., Battle Creek, Editor of The Journal, MSMS, spoke before the Sociology Club of Western Michigan College, Kalamazoo, on January 24. His subject was "The Leaning Tower of Socialism." Dr. Haughey also spoke on December 13 to the Battle Creek Retail Druggist Association on "Socialized Medicine is the Entering Wedge to General Socialism."

* * *

The first residency in Industrial Medicine and Surgery in the United States, approved by the American Medical Association, recently was inaugurated in the Saginaw (Michigan) General Hospital.

* * *

The Upper Peninsula Medical Society members and their wives will convene at Houghton, in the heart of the Copper Country's beautiful vacation land, on June 23 and 24. Committees have been appointed by Dr. Alfred

An Observation on the Accuracy of Digitalis Doses

Withering made this penetrating observation in his classic monograph on digitalis: "The more I saw of the great powers of this plant, the more it seemed necessary to bring the doses of it to the greatest possible accuracy."[1]

To achieve the greatest accuracy in dosage and at the same time to preserve the full activity of the leaf, the total cardioactive principles must be isolated from the plant in pure crystalline form so that doses can be based on the actual weight of the active constituents. This is, in fact, the method by which Digilanid® is made.

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Clinical investigation has proved that Digilanid is "an effective cardioactive preparation, which has the advantages of purity, stability and accuracy as to dosage and therapeutic effect."[2]

Average dose for initiating treatment: 2 to 4 tablets of Digilanid daily until the desired therapeutic level is reached.
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1. *Withering, W.:* An account of the Foxglove, London, 1785.
2. *Rimmerman, A. B.:* Digilanid and the Therapy of Congestive Heart Disease, Am. J. M. Sc. *209:* 33-41 (Jan.) 1945.

Literature giving further details about Digilanid and Physician's Trial Supply are available on request.

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LaBine, president of the U.P. group, and plans are well under way to make this Fifty-Second Session an outstanding success, both from the scientific and social standpoint.

The Copper Country offers some of the country's most beautiful scenery, and a wide variety of vacation activities. Doctors of the Lower Peninsula are urged to mark the dates, and are cordially invited to attend the meeting and enjoy a vacation. Information may be secured by writing to the secretary, Dr. A. B. Aldrich, Hancock.

* * *

Medical Michigan Authors

Hermann Pinkus, M.D., of Monroe, Michigan, published a paper, "Preliminary and Short Reports, Mitotic Division of Human Dendritic Melanoblasts" in *Journal of Investigative Dermatology,* December, 1949.

Don Marshall, M.D., of Kalamazoo, Michigan, published a paper, "Lacerations of the Eye" in *JAMA,* January 28, 1950.

Aaron A. Farbman, M.D., of Detroit, Michigan, published a paper, "Retroperitoneal Fatty Tumors: Report of a Case and Collective Review of the Literature from 1937 to 1947," in *Archives of Surgery,* February, 1950.

Ralph Lee Fisher, A.B., M.D., F.A.C.P., and **Morris Zukerman, A.B., M.D.,** Detroit, Michigan, published a paper, "Massive Dosage of Penicillin Administered by Continuous Intramuscular Infusion", in *Internal Medicine,* June, 1948.

Ralph Lee Fisher, M.D.; Morris Zukerman, M.D., and **Donald N. Sweeny, Jr., M.D.,** Detroit, Michigan, published a paper, "Tetraethylammonium Chloride in Treatment of Herpes Zoster and Intercostal Neuralgia," in *Archives of Neurology and Psychiatry,* February, 1949.

* * *

Examination for Medical Officers.—The United States Health Service will hold examinations for medical officers in the regular corps on May 15, 16, 17, 1950 at a number of points throughout the United States.

Applications must be received not later than April 17. Requirements: United States citizen, at least 21 years of age, graduated from a recognized school of medicine.

Assistant Surgeon—At least seven years of educational training and professional experience subsequent to high school.

Senior Assistant Surgeon—At least ten years of educational training and professional experience subsequent to high school.

* * *

Michigan Essayists: The American College of Surgeons' sectional meeting, February 20 and 21, 1950, Louisville, Kentucky, featured several Michigan essayists: "Injuries to the Elbow Region," George J. Curry, M.D., Essayist, Flint, Michigan; "Intestinal Obstruction, Panel Discussion," Clifford D. Benson, M.D., Detroit, Michigan; "Immediate Care of the Injured," George J. Curry, M.D., Flint, Michigan; "Gastric and Intestinal Intubation," Charles G. Johnston, M.D., Detroit, Michigan.

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Surgical Technic, Surgical Anatomy and Clinical Surgery, four weeks, starting March 6, April 3, May 1.
Basic Principles in General Surgery, two weeks, starting April 3.
Personal Course in General Surgery, two weeks, starting April 17.
Surgery of Colon and Rectum, one week, starting April 10, May 15.
Esophageal Surgery, one week, starting June 5.
Breast and Thyroid Surgery, one week, starting June 26.
Thoracic Surgery, one week, starting June 12.
Gallbladder Surgery, ten hours, starting April 24.
Fractures and Traumatic Surgery, two weeks, starting March 20, June 12.
GYNECOLOGY—Intensive Course, two weeks, starting March 20, April 17.
Vaginal Approach to Pelvic Surgery, one week, starting April 3.
OBSTETRICS—Intensive Course, two weeks, starting April 3, June 5.
PEDIATRICS—Intensive Course, two weeks, starting April 3.
Personal Course in Cerebral Palsy, two weeks, starting July 31.
Personal Course in Diagnosis and Treatment of Congenital Malformations of the Heart, two weeks, starting June 5.
MEDICINE—Intensive General Course, two weeks, starting April 24.
Electrocardiography and Heart Disease, two weeks, starting July 17.
Hematology, one week, starting May 8.
Gastro-Enterology, two weeks, starting May 15.
Liver and Biliary Diseases, one week, starting June 5.
Gastroscopy, two weeks, starting May 15, June 12.
DERMATOLOGY—Formal Course, two weeks, starting May 8. Informal Clinical Course every two weeks.
UROLOGY—Intensive Course, two weeks, starting April 17. Cystoscopy, ten day practical Course, every two weeks.

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Research Grant: The Research Division of Harper Hospital Detroit, Michigan, has announced the grant of $10,000 from the U. S. Public Health Service, National Institute of Health, Division of Medical Research Grants to Louis A. Schwartz, M.D., for a research study to be made on the "Psychosomatic Aspects of Peptic Ulcer." Research assistant and psychiatric social worker is Miss Josephine Groves, a graduate of the Smith College School of Social Work. The research will consist of determining the specific psychodynamic factors precipitating peptic ulcer in types of personality structure, and will include continuous motility studies, determination of total acidity and volume flow of gastric secretion, checked and controlled by pharmacological methods to show the relationship of emotional excitation and gastric physiology. Psychological tests of the projective type, encephalographic tracings and peripheral vascular changes will be correlated with observations as to underlying emotional factors. Intensive individual psychotherapy will be extended to some patients while others will be treated by group psychotherapy. It is planned to repeat these observations following vagotomy in some cases to evaluate the pathways for emotional excitation.

* * *

Experimental Status of Hormone Drugs Makes General Use Undesirable, Says A.M.A.

Widespread use of ACTH and cortisone in the routine practice of medicine would be extremely undesirable at present, according to the American Medical Association's Council on Pharmacy and Chemistry.

A report of the council appearing in the February 4 JAMA says in part:

"In the present state of our knowledge it would be extremely undesirable to permit widespread use of these potent preparations in the routine practice of medicine, and it is perhaps fortunate that neither drug is now available in unlimited quantities.

"Because of the limited amounts of both drugs presently available, their use must be restricted to those instances where they will aid in understanding the mechanism of a disorder."

The report points out that while prompt and dramatic relief has been provided in arthritis, gout and other diseases, the improvement usually is maintained only as long as the administration of the drug is continued.

* * *

National Legislation—S. Res. 204: On January 6, 1950, Senator Langer of North Dakota introduced a resolution in the Senate to create a three-man subcommittee of the Senate Judiciary Committee for the purpose of making a full and complete investigation "to determine the causes of the high prices of eyeglasses and to ascertain whether manufacturers are sharing profits with oculists and optometrists."

* * *

Alfred H. Whittaker, M.D., of Detroit is another Michigan doctor who this year is president of a national medical organization, and is presiding at an annual meeting. The American Association of Industrial Physicians and Surgeons annual conference will be held in the Hotel Sherman, Chicago, April 22-29, 1950.

The Upper Peninsula Medical Society meeting will be held at the Michigan College of Mines and Technology, Houghton, Michigan, on Friday and Saturday, June 23-24, 1950. Program will be published in the April Number of JMSMS. Alfred LaBine, M.D., Houghton, is President; N. J. McCann, M.D., of Ishpeming, is President-Elect; and Addison Aldrich, M.D., of Houghton, is Secretary.

* * *

Tuberculosis Deaths. In 1933 nineteen States and the District of Columbia had death rates of sixty or more per 100,000. By 1940 this number had been reduced to seven and by 1948 to only one. In 1933 only ten of the States had death rates under forty, whereas in 1948 only six States had rates over forty.

* * *

Representative Reva Beck Bosone, D., Utah, on January 16 introduced HR 6766, a compulsory health insurance bill, substantially the same as the administration plan, except that the beneficiary would bear the first $50.00 in medical care expenses each year for himself and dependents, and $25.00 for dentist bills. After that the plan would assume further obligations.

It has been referred to the Interstate and Foreign Commerce Committee. The scheme provides for fifteen member "Health Boards" in each of the states appointed by (The Medical Society having the largest membership in the state). This board will have six physicians, three dentists, two nurses, two hospital supervisors, and two pharmacists, all serving four-year terms. Their main job would be to set fee schedules in conformity with regulations of the Federal Security Agency. It provides a 3 per cent payroll tax, and an additional 1 per cent taken from the general funds in the Treasury to meet deficits. It covers the same group covered by the Social Security laws as amended.

Representative Kenneth B. Keating, R., New York, introduced HR 6727, a bill aimed at bolstering membership in pre-payment plans by allowing subscribers to deduct premiums paid from their income taxes. He discovered that he had inadvertently made his bill subservient to the Flanders-Ives-Herter bill of the Senate, so on January 17, Tuesday, introduced a new bill HR 6819, providing more liberal definitions of pre-payment groups whose members or clients may claim deductions from income tax.

The new bill provides that premiums be deductible from taxes whether they were paid to co-operatives, medical, or hospital groups, giving services on a pre-payment basis for organizations of the Blue Cross, Blue Shield type, whether publicly or privately operated, whether commercial or non-profit.

* * *

FBI Still Active. Five agents of the Chicago office of the Federal Bureau of Investigation are still at work at AMA Headquarters checking the records of various

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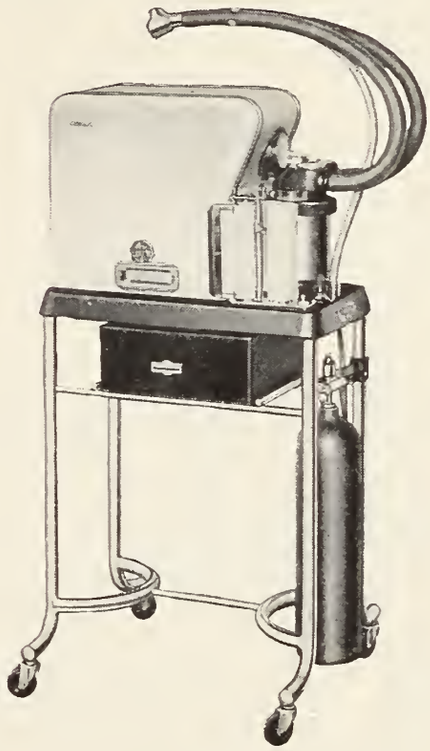

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Serology	Court Testimony

Bureaus and Councils. They are using the Board of Trustees room, and so far have checked the records of the Secretary's office, the Judicial Council, the Board of Trustees, the Council on Medical Service, the Co-operative Medical Advertising Bureau and the Council on Medical Education and Hospitals. They are now checking the records of the Bureau of Economic Research.

In October, Attorney General Howard McGrath announced that the Justice Department wants to know if any monopoly existed in connection with pre-payment medical plans. McGrath was formerly Chairman of the Democratic National Committee.

* * *

Raymond Hussey, M.D., former Dean of the School of Occupational Health, Wayne University, Detroit, has joined the staff of the Council of Industrial Health, AMA, as Scientific Director. He relinquished his membership on the Council in order to take this position. He had been a member since 1941 and Vice Chairman for several years.

* * *

Staff Members at Cottage Hospital of Grosse Pointe, Michigan, are giving a series of weekly lectures to the Nursing Staff of the hospital. Subjects for discussion are concerned with new drugs and the medical and nursing care in some of the specialties.

* * *

Medical Students: The Council on Medical Education and Hospitals of the American Medical Association has just made a study to determine the comparative enrolments in approved medical schools during the forty years since 1910, when the Council published its first list of approved medical schools.

This study reveals that in 1910 there were sixty-six Class A medical schools with a total enrolment of 12,530 students; in 1920 there were seventy Class A medical schools with a total enrolment of 12,559 students; in 1930 there were seventy-six approved medical schools with a total enrolment of 21,597; in 1940 there were seventy-seven approved medical schools with a total enrolment of 21,271; in 1950 there are seventy-nine approved medical schools with an estimated total enrolment of 24,800 students.

These data clearly show that the opportunities to study medicine in approved medical schools have practically doubled in the last forty years and have more than kept pace with the growth in population.

The number of physicians per 100,000 population in the United States declined from 149 in 1909 to 125 in 1929. Since 1929 the ratio has steadily risen to 137 in 1949. These new data showing the increasing number of students enrolled in approved medical schools reveal clearly that the decline in the physician-population ratio from 1909 to 1929 was due entirely to the closing of substandard medical schools. A physician-population ratio that included only physicians who were graduated from approved medical schools would reveal a steadily rising trend in the past four decades.

Even the poorest of the approved medical schools today have better staffs and facilities than most of the approved medical schools of thirty or forty years ago, and the leadership of the medical profession and the medical

Say you saw it in the Journal of the Michigan State Medical Society

colleges has resulted in the training of a greatly increased number of well qualified physicians to serve the American people.

This accomplishment is important in the increasing life expectancy. In the last forty years life expectancy at birth in the United States has increased more than seventeen years. This accomplishment also is important in the reduction of maternal mortality, which in the last twenty years has been reduced by more than 85 per cent, and has influenced considerably the over-all crude death rate for the nation, which has shown a gradual decrease despite the aging of the population.

The general health of the population of the United States is constantly improving. No one can deny this without resorting to falsification. Those who claim that a health crisis exists in this country cannot prove it, and yet by inference, and often more directly, they plead a crisis to bolster their arguments for enlargement of medical schools and increase in enrolments of students.

The latest report from the Council on Medical Education offers a convincing reply to those who doubt the effectiveness of the present orderly progression in medical education to meet the health needs of the nation. To heed the pleas of those who would discard order for chaos would cause a farrago that would return the level of medical education and care to that of several decades ago.—Editorial, *JAMA,* Feb. 10, 1950.

* * *

HIGHLAND PARK POSTGRADUATE CONFERENCE

(Homecoming Day for Interns and Residents)

Wednesday, April 19, 1950

Highland Park General Hospital, Highland Park, Michigan

All doctors of medicine are cordially invited to attend. No registration fee.

Program

"The Adaptation Syndrome" (sometimes called the Alarm Reaction)
HANS SELYE, M.D., Ph.D., D.Sc., F.R.S. (C)
Professor and Director of the Institute of Experimental Medicine and Surgery, University of Montreal, Montreal, Quebec, Canada.

"The Relation of Anesthesia to Obstetrics"
LOUIS M. HELLMAN, M.D.
Associate Professor of Obstetrics, Johns Hopkins Medical School; obstetrician and co-director of anesthesia and analgesia program, Johns Hopkins Hospital

"The Effects of Massive Radiation Exposure and Possible Therapeutics"
(In other words in case of atomic warfare in Michigan, what does it do, how should you protect yourself, and what might you use for treatment)
HYMAN L. FRIEDELL, M.D.
Director of the Department of Radiology, University Hospitals of Cleveland

"The Mechanism Involved in Congestive Heart Failure as a Guide in Its Management"
THOMAS J. DRY, M.D.
Cardiologist, Mayo Clinic, Rochester, Minn.

Surgical Speaker to be announced possibly on the subject of "The Indications for Cardiac Surgery"

Luncheon at noon courtesy of the Highland Park General Hospital Management Conference sponsored by the Highland Park Physicians Club

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The eightieth birthday of one of Jackson's most beloved physicians was appropriately celebrated as all the members of the Jackson County Medical Society gathered on Thursday, February 2, to honor C. D. Munro, M.D., a veteran of more than fifty years of medical practice.

The program honoring Doctor Munro began in the afternoon with speeches by prominent physicians from throughout the country including J. C. Meigs, M.D., Boston, Mass., Walter C. Alvarez, M.D., Rochester, Minn., and Frederick A. Coller, M.D., Ann Arbor.

The principal speaker at the evening banquet was George M. Curtis, M.D., Chairman and Professor of Surgical Research at Ohio State University Medical School. Dr. Curtis, a native of Jackson County, noted that the poise and dignity of a young doctor (Dr. Munro) back in 1903 had helped him in his decision to become a member of the medical profession.

Dr. Munro was presented with a gold watch, chain and knife by Mr. Carl Saunders, Editor of the *Jackson Citizen-Patriot* and a lifetime friend of the medical profession. The watch was suitably inscribed "To Dr. Colin D. Munro on his 80th birthday from the Jackson County Medical Society."

Testimonial wires and letters from friends all over the United States were read and presented to Dr. Munro and to Mrs. Munro, who attended with her husband.

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GENESEE COUNTY MEDICAL SOCIETY
Fifth Annual Cancer Day
Wednesday, April 12, 1950
Merliss Brown Auditorium
Hurley Hospital, Flint, Michigan

9:40 A.M.

"Cancer of the Kidney and Bladder"
REED M. NESBIT, M.D., Professor of Surgery and Chief of Urological Service, University of Michigan Medical School, Ann Arbor

"Hopeful Aspects of Malignant Lymphomas"
LLOYD F. CRAVER, M.D., Attending Physician, Memorial Hospital, Associate Professor of Clinical Medicine, Cornell University Medical College, New York City

"The Management of Cancer of the Mammary Gland"
CUSHMAN D. HAAGENSEN, M.D., Clinical Professor of Surgery, Director of the Institute of Cancer Research, College of Physicians and Surgeons, Columbia University, New York City

"Cancer of the Regional Lymph Nodes"
GRANTLEY W. TAYLOR, M.D., Associate in Surgery, Harvard University Medical School, Visiting Surgeon, Massachusetts General Hospital, Boston, Mass., Chairman of the Cancer Committee American College of Surgeons

"Early Signs and Symptoms of Intercranial Tumors"
PAUL C. BUCY, M.D., Professor of Neurology and Neurological Surgery, University of Illinois College of Medicine, Chicago, Attending Neurological Surgeon, Illinois Neuropsychiatric Institute, Chicago

Luncheon
Hurley Hospital Cafeteria

5 to 7:00 P.M.
Social Hours

7:00 P.M.
Subscription Dinner

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Acknowledgment of all books received will be made in this column, and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.

ATTAINING MANHOOD. A Doctor Talks to Boys About Sex.
ATTAINING WOMANHOOD. A Doctor Talks to Girls About Sex. By George W. Corner, M.D., Professor of Anatomy, University of Rochester Medical School. New York: Harper & Brothers, 1950. Price $1.25 each.

These two books are separately issued by the same author. They are clearly and simply written, giving brief, but exact expression of the facts presented. They are sufficiently illustrated, and make a good guide to early instruction on sex principles.

MARIHUANA IN LATIN AMERICA, THE THREAT IT CONSTITUTES. By Pablo Osvaldo Wolff, M.D., Ph.D., M.A., Member of Expert Committee on Habit Forming Drugs of the World Health Organization; Sponsored by the Washington Institute of Medicine. Washington, D. C.: The Linacre Press, 1949. Price $1.50.

This book is translated from the Spanish, and is a very complete study of the Marihuana question, telling of the growth of the weeds. The situation in Mexico, Cuba, Argentine and other South American countries is especially given attention. It is a challenging study.

THE EYE AND ITS DISEASES—by 92 International Authorities: Edited by Conrad Berens, M.D., F.A.C.S. New, 2nd Edition. 1,092 pages with 436 figures, 8 in colors. Philadelphia and London: W. B. Saunders Company, 1949. Price $16.00.

The thirteen years since the first edition of this book have been fruitful ones in ophthalmology, and an effort to grasp and present the new material and treatment has been rather well done. There are ninety-two contributors, two from Michigan, Professors Fralick and Ruedemann. Dr. Fralick has the chapter on diseases of the sclera and Dr. Ruedemann the enucleation of the eyeball. The chapter formerly written by Harry S. Gradle and rewritten by Duke Elder is probably one of the best in the book, and one needing the most study. In that chapter we are unable to find mention of a condition which we are finding, and which cannot be diagnosed as simple or compensated glaucoma yet, but must be called "potential" or pre-glaucoma. The chapter on tonometry rather hints at this fact. It mentions that 40 per cent of eyes which are consistently found with a pressure of 27 to 31 mm. of mercury will within two years become glaucomatous. Other chapters of the book are just as interesting and valuable, most being devoted to diagnosis and the scientific study of the disease. Separate chapters treat of eye surgery and treatment. A most valuable book for the teacher and the advanced student.

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THE JOURNAL
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VOLUME 49 APRIL, 1950 NUMBER 4

Contributors to this Issue

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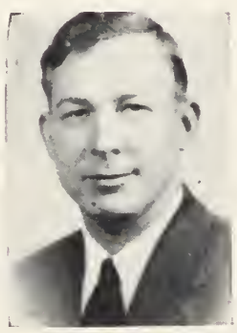
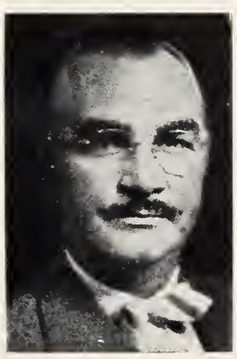


Charley J. Smyth, M.D.



E. G. Waters, M.D.

E. H. Watson, M.D.

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Motion Picture - A Public Relations Medium

The most entertaining, most difficult from a production standpoint and one of the most valuable and economical media available in the field of medical public relations is that of the motion picture.

Chairman Arch Walls, M.D., of the MSMS Cinema Committee goes over the shooting script with veteran movieman Frank Goldman, producer of both MSMS movies. Other Cinema Committee members are A. E. Schiller, M.D., Detroit and R. F. Salot, M. D., Mount Clemens.

The Michigan State Medical Society has already produced two professional film productions. The first, "Lucky Junior," deals with the advantages of immunization while the latest 12-minute film, "To Your Health" deals with the disadvantages of Socialized Medicine.

The use of motion picture films for presentation in motion picture theaters by the Michigan State Medical Society is another of the society "first's." In this pioneering effort the society has found one of the most effective and acceptable forms of reaching the public. The expenditures coincident with the development of the visual program have been large at the outset but small in point of persons reached. The success is evidenced by the adoption of similar programs by other state medical societies. The Michigan films are being requested and used throughout the United States. Present plans of the Cinema Committee call for no new commercially released films this year but for a series of pictures of the training film variety.

Films, to obtain maximum benefit and value per dollar invested, should be produced by professional companies under supervision of the medical society. Film producers have developed techniques wherein films of 10-minute length may be made for as little as $1,000. These particular films are not designed for commercial showing but instead are best used for presenting an idea to controlled groups. Films of this nature may be produced in as short a period as one month. These less expensive films may be used as training films and their value lies in the fact that visual presentations make a greater impact than do written or printed materials.

The Michigan State Medical Society is at present engaged in the production of five such in-

EDITOR'S NOTE: This is the fourth in a series presenting various communication media used by the Michigan State Medical Society in the furtherance of their public education program.

formative films. The first, "The Glass House," will soon be ready for showing to county medical societies throughout Michigan.

Slide films, strip-films and other forms of presentation can be used in many ways by county and state medical societies. They represent an inexpensive method of showing visually the work of particular committees, the aims of certain health projects, etc.

The time required for production is such that they can be developed in a relatively short space of time with the use bringing great benefit to the sponsoring organization. One of the outstanding

Interior shot from "Lucky Junior," first film devoted solely to subject of immunization.

Still shot showing birth-print of baby as contained in MSMS initial film production "Lucky Junior."

efforts of this kind has been made by the Michigan Crippled Children Commission in which a series of slides on Rheumatic Fever have been developed accompanied by a sound track which gives the story of Rheumatic Fever and the Rheumatic Fever Diagnostic and Consultation Centers program of the MSMS.

The most costly films—and the most helpful with the public directly, are those designed for showing in the commercial theaters of the state. The success of "Lucky Junior," first of the professional productions of the MSMS, and the present record being established by "To Your Health" in its tour throughout Michigan's commercial movie. circuit are testimonials to the effectiveness of this medium.

The production of the two MSMS 10-minute sound pictures represents an outlay of about $20,000. To the average person this seems like an extraordinary amount for a single film and appears to be an unusually expensive form of public relations. However, when the cost of a film is divided by the number of persons contacted it proves to be less than the cost of sending a penny post-card to each person.

Additional benefits are derived from the showing of the same film, in 16 mm. form, to all interested groups who request it after the theater showings have been completed. Eventually the film may be

Professional actors carry story against socialized medicine to screen in second MSMS motion picture, "To Your Health."

seen by several million persons at a cost per person of a small fraction of a cent.

Many trade associations maintain film libraries for the purpose of loaning films to requesting groups. The titles vary with the organization main-

(Continued on Page 463)

Annual Heart Day Unqualified Success

Three hundred and six Michigan medical men gathered in Detroit, March 11, to attend the annual "Heart Day" meeting of the Michigan Heart Association, held in conjunction with the Michigan Postgraduate Clinical Institute. Heart Day guests heard research reports covering latest scientific developments regarding arteriosclerosis, hypertension, and rheumatic fever. At the annual meeting of the Board of Trustees and the membership of the Michigan Heart Association, which followed the scientific session, Paul S. Barker, M.D., Ann Arbor, took office as president of the Association, and Douglas Donald, M.D., Detroit, was elected to the office of president-elect.

Warren B. Cooksey, M.D., Detroit, first president of the Association, opened the morning session by reviewing the activities of the eighteen-month-old organization.

Hugh McCulloch, M.D., Chicago, Chief of Staff, La Rabida Sanitarium, and Medical Director of the Council on Rheumatic Fever of the Chicago Heart Association, told the Heart Day audience of the work being done with ACTH in treating rheumatic fever patients.

"ACTH does not seem to be as effective in treating mild cases of rheumatic fever; in critical cases—it has shown enormous effect," Dr. McCulloch said. "Ten patients with severe cases of the disease have been successfully treated."

"A year ago," he said, "we thought we knew the cause of rheumatic fever—a streptococcus infection. Today, since the work with ACTH, we are more confused than ever over the cause, yet doubtless nearer the solution."

Louis N. Katz, M.D., Chicago, director of cardiovascular research at Michael Reese Hospital, told Michigan doctors of medicine that arteriosclerosis may be a reversible condition in man; it has been found to be so in chickens. Current knowledge emphasizes the rôle of fatty materials, particularly cholesterol, in the causation of arteriosclerosis.

Irvine H. Page, M.D., of Cleveland, chairman of the Council of the American Foundation for High Blood Pressure, stated that about fifty causes are known for hypertension. "Great strides have been made in treating some few kinds in the last five years. However, a complete cure is rarely achieved today," Dr. Page said.

Paul S. Barker, M.D., Associate Professor of Medicine, University of Michigan, Ann Arbor, presented the past and present concepts of heart research, pointing out areas in which future research is particularly necessary and is being planned.

In addition to President Barker and President-elect Douglas Donald, other officers elected for 1950 are: C. E. Wilson, Detroit, Chairman of the Board; Frank Van Schoick, M.D., Jackson, Vice President; Mrs. Hugh E. Wilson, Ann Arbor, Vice President; Charles T. Fisher, Jr., Detroit, Treasurer; and L. Fernald Foster, M.D., Bay City, Secretary. Leon De Vel, M.D., Grand Rapids, continues as Executive Secretary.

One-third of the Board of Trustees, whose term of office expired in 1950, were re-elected to office. Those newly re-elected, terms expiring in 1953, are: Paul S. Barker, M.D., Mrs. Harold Boyer, Harvey Campbell, M. S. Chambers, M.D., L. T. Colvin, M.D., Warren B. Cooksey, M.D., Moses Cooperstock, M.D., Cecil Corley, M.D., C. G. Darling, M.D., W. H. Doerfner, Henry Fink, Charles T. Fisher, Jr., and Frank N. Isbey.

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Delegates from the Michigan Heart Association to the American Heart Association are: Paul S. Barker, M.D., M. S. Chambers, M.D., L. T. Colvin, M.D., Warren B. Cooksey, M.D., Carleton Dean, M.D., F. D. Dodrill, M.D., Douglas Donald, M.D., L. P. Ralph, M.D., F. Janney Smith, M.D., and Frank Van Schoick, M.D.

A strong vote of thanks was given by the Board to immediate Past-President, Warren B. Cooksey, M.D., Detroit, for the groundwork he has done in organizing and carrying on the activities of the Association during its inaugural year.

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Pictorial Highlights—1950 Postgraduate Institute

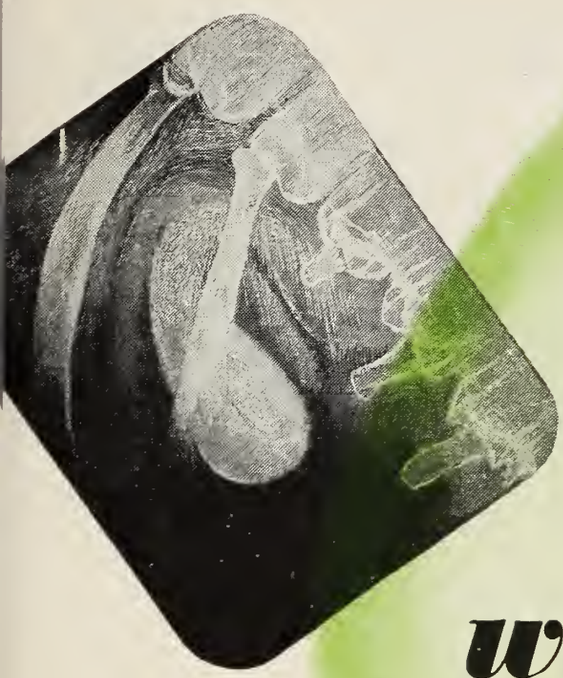
(Top) At the Friday noon luncheon F. A. Coller, M.D., Ann Arbor, President of the American College of Surgeons, was honored with a scroll testifying to his contributions and service to the medical profession. Seated left to right are: J. Joseph Herbert, Manistique, J. L. Jaffe, M.D., Detroit, C. E. Umphrey, M.D., Detroit, Isadore Snapper, M.D., New York City, Grover C. Penberthy, M.D., Detroit, W. E. Barstow, M.D., St. Louis, Frederick A. Coller, M.D., Ann Arbor, P. D. Wilson, M.D., New York City, and C. S. Kennedy, M.D., Detroit.

(Upper left) John C. Maxwell, M.D., eighty-four-year-old general practitioner from Paw Paw, is congratulated by R. J. Hubbell, M.D., Chairman of the Wednesday evening public meeting, at which Dr. Maxwell received the scroll designating him as "Michigan's Foremost Family Physician for 1949."

(Center left) President Barstow of the MSMS chats with Frederick A. Coller, M.D., after presentation of scroll to Dr. Coller. Dr. G. C. Penberthy looks on.

(Lower left) Patrick Ledwidge, Jr., accepts a testimonial scroll for his father, P. L. Ledwidge, M.D., Detroit, from MSMS President W. E. Barstow, M.D., Detroit. Dr. Ledwidge, absent due to a serious illness, was honored for his long years of service to medicine in Michigan. (Dr. Ledwidge died April 15, 1950.)

(Lower right) Photo of the University of Michigan Men's Glee Club during one of their numbers under the direction of Professor Philip Duey. The glee club rendered several selections to open the Wednesday night program.



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1. Brewer, A. A.: Radiology *48*:269, 1947.

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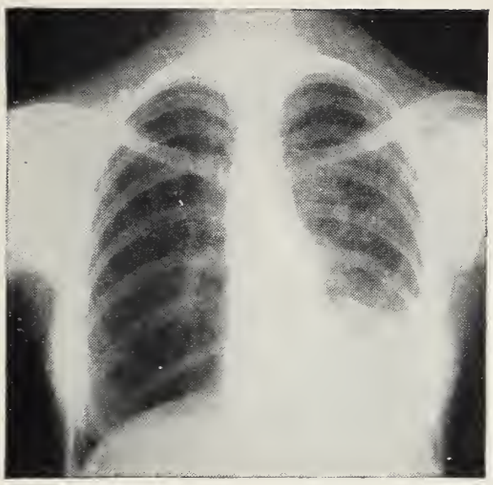
HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of February 8, 1950

- Monthly financial reports, including statements on the Public Education Fund and the Public Education Reserve account, were presented, studied and approved.
- Authorization was given the Secretary to invite E. L. Henderson, M.D., President-Elect of the American Medical Association, to attend the MSMS Annual Session in Detroit, September, 1950.
- The second Michigan Cancer Conference, scheduled for April 18, sponsored by the Michigan Cancer Control Committee, was approved and authorized to be held; also the printing of the revised "Michigan Cancer Program."
- Phraseology of the scrolls to be presented in March to J. Charles Maxwell, M.D., Paw Paw, "Michigan's Foremost Family Physician"; to ACS President Fred A. Coller, M.D., Ann Arbor; to MPCI Chairman P. L. Ledwidge, M.D., Detroit; and to Albert H. Whittaker, M.D., Detroit, President of the American Association of Industrial Physicians and Surgeons, was approved.
- The Committee on Arrangements and Program for the 1951 Michigan Postgraduate Clinical Institute, with MSMS Past President B. R. Corbus, M.D., Grand Rapids, as Chairman, was appointed.
- A joint meeting of the MSMS Executive Committee of The Council and of the Executive Committee of the Board of Commissioners, State Bar of Michigan, was authorized for April 19 in Detroit.
- A letter of commendation from George F. Lull, M.D., Secretary and General Manager of the American Medical Association, on the high standing of Michigan's medical profession in the payment of the 1949 voluntary AMA assessment, was read.
- An Advisory Committee to the Superintendent of Public Instruction, to review curricula of schools for G.I. training, was appointed: Wilfrid Haughey, M.D., Battle Creek, Chairman, L. Fernald Foster, M.D., Bay City, W. B. Harm, M.D., Detroit, J. A. Kasper, M.D., Detroit, and L. A. Pratt, Detroit.
- Report on the National Conference on Medical Service, held in Chicago on February 5, was presented by Past President E. F. Sladek, M.D., Traverse City, and by Public Relations Counsel H. W. Brenneman; also report was given on the forthcoming Brookings Institution Survey of Health Services and the meeting held in Chicago on February 5 with representatives of the Brookings Institution.
- Press Conferences were announced for Bay City on January 10, Battle Creek on February 24, Traverse City on March 3, Detroit on March 7, and Flint on March 13. Other conferences are planned for Jackson, Ann Arbor, Lansing, Pontiac, Muskegon, Kalamazoo, Port Huron and Grand Rapids.
- The Public Relations Counsel reported that the Speakers Manual had been sent to the printer and would soon be available for doctors listed in the files of the MSMS Speakers Bureau.
- An examination test, similar to the test given experimentally at the Annual County Secretaries-Public Relations Conference of January 22, was authorized to be printed for use as a basis for talks by physicians to lay groups.
- A Rheumatic Fever Center campaign of three months' duration, beginning March 1, was authorized to be developed and carried out by the Public Relations Department in co-operation with the Michigan Heart Association.
- MSMS Films: "Lucky Junior" will be shown in 400 Michigan theaters; "To Your Health" will be shown in 150 Michigan theaters of the Allied Theater Chain and in an additional 100 to 150 theaters of the Co-operative Theater Chain.
- Drs. A. S. Brunk, L. W. Hull, and Mr. Brenneman were authorized to attend the National Education Conference of the American Medical Association in Chicago February 12, as guests of the AMA.
- The new exhibit of the MSMS Public Relations

(Continued on Page 457)



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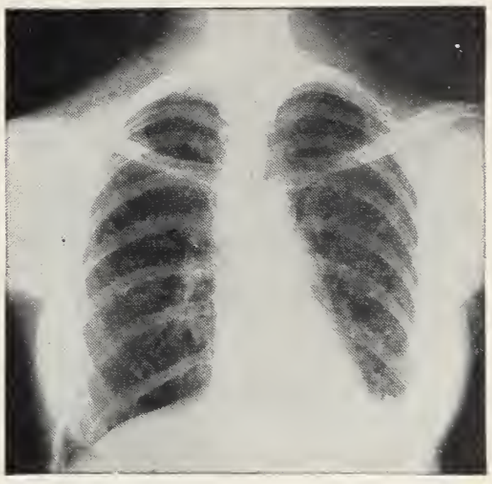

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Cancer Comment

A COUNTY HIGH SCHOOL CANCER EDUCATION PROGRAM

In Genesee County, an interesting cancer educational program has been carried out in the High schools during the present school year. This program has been directed at both pupils and science teachers in all the public and parochial high schools of the county.

The program was developed by the Genesee County Unit of the American Cancer Society with the co-operation of the County School Commissioner, the superintendent of the Flint schools, the County Medical Society and the Flint and County Health Departments.

During the previous ten years, each high school in Flint and many suburban communities had informative cancer talks to the student body or science classes. The science teachers of Flint schools had attended a cancer seminar where the subject was discussed in considerable detail and an opportunity given to become fully informed about the fundamentals of cancer knowledge and their application to the teaching of this subject to high school age groups. This aroused sufficient interest in the subject to have a teaching unit on cancer added to the health study curriculum of the city's high schools.

During November-December, 1949, every public and parochial high school in Genesee County was addressed by a physician on the subject of cancer. At each assembly, time was given for questions in order that the pupils could have explained any points not made entirely clear by the speaker. Physicians representing the Genesee County Medical Society, Michigan Department of Health and the Cancer Control Committee, Michigan State Medical Society, were the speakers at these meetings. Approximately 9,000 high school pupils and teachers heard these discussions.

These high school meetings were intended to introduce the subject of cancer to teachers and pupils and create an interest in adding this subject to the general health instruction of these schools. Sufficient interest was aroused among the teachers to call for further information about cancer and ways of incorporating this subject into their health class instruction.

To satisfy this interest, a seminar for high school science teachers and school administrators was organized. This seminar was held in Flint at weekly intervals for five 2-hour meetings. Practically every high school in the county was represented in the attendance, as were the city and county health departments, the Visiting Nurse Association and other health and welfare organizations of the county have an interest in the cancer problem.

One meeting was devoted to the presentation of some of the important clinical aspects of cancer control. A pathologist, radiologist, surgeon, gynecologist and internist, selected by the Cancer Committee of the Genesee County Medical Society, discussed their respective roles in cancer diagnosis and treatment. These discussions helped materially to clarify the thinking of many members of the seminar on the physician's role in the cancer control program.

A packet of books, journals and pamphlets on cancer for each high school library is being furnished by the Genesee County Unit of the American Cancer Society. A manual for use by the science teachers in the high schools of the county is in preparation by the Cancer Control Committee, Michigan State Medical Society.

A recent national survey has revealed that less than 50 per cent of the people know anything about the early signs of cancer. In the face of this crying need for more lay education, a constructive high school program as here described provides information about cancer to an important segment of the population in each community. High school students have open acquisitive minds and welcome the opportunity to obtain knowledge that will be helpful and protective throughout their lives. Experience has shown that they will make a more practical application of this knowledge than will many of their parents and others of older age. It is believed that similar programs can and should be organized for all high schools in Michigan. In this way, a greater portion of the public can be reached with a cancer program than by any other means yet devised.

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Editorial Comment

GOVERNMENT HOSPITAL SPENDING

The only encouraging aspect to arise out of the Percy Jones hospital muddle is the clear-cut example it provides of wasteful federal hospital planning.

Percy Jones stands as a monumental symbol of government agencies working at cross purposes. Thus it gives a compelling motive for other communities to demand action on the Hoover reforms.

Our neighboring newspaper, the *Jackson Citizen Patriot*, for example, observes that the army's order to close the hospital "has produced proof of the wisdom of the Hoover commission recommendation for a unified federal hospital administration."

It is a relief to note, too, that the Battle Creek attitude on the Percy Jones closing has not been misunderstood as an uproar based solely on local interests. The Jackson paper's editorial continued:

"It must be said to the everlasting credit of Battle Creek that their questions aroused greater concern over the waste which now results from the lack of co-ordination of federal hospital services than over the actual closing of Percy Jones.

"Following the developments from this distance we have gained the impression that the people of Battle Creek would be fairly well satisfied if they could be shown that closing of the hospital was a real economy move and that federal hospital services everywhere were being unified to save money.

"As matters stand now, the people of Battle Creek are disgusted and angry over what they have learned about waste in the federal hospital program. They believe if Percy Jones is closed and permitted to stand idle it will be an expensive monument to government inefficiency."

The *Citizen Patriot* then went on to recount facts known here: The Veterans Administration refusal to show any interest in taking over Percy Jones, despite the fact that VA is building and plans to build more multi-million dollar hospitals all over the country; the outlandish announcement of the U. S. Public Health Service, following the order to close Percy Jones, that the USPHS intends to spend $37,000,000 on a new federal hospital in Detroit for the maritime services and the coast guard; the ludicrous admission by a USPHS official that his agency knew nothing of army hospital plans and had practically no contact with other federal agencies building hospitals.

Unfortunately, the Percy Jones case is not a singular one. Scores of similarly wasteful instances were highly publicized more than a year ago by the Hoover commission. So long as the Hoover recommendations for a centralized federal hospital service are ignored, there will be countless repetitions of waste and bungling.—Editorial, *Battle Creek Enquirer-News*, February 19, 1950.

ACTION AGAINST DEVIATES

The *Michigan State Medical Society* has entered the statewide fight to control sex deviates and suppress terror crimes.

The society recommends to the governor substitution of a better law for the present Goodrich Act governing sex criminals, and the establishment and improvement of psychiatric clinics.

Further, the doctors demand that the problem of sex deviates be considered an emergency.

A committee of physicians appointed by the society is prepared to follow through the recommendations.

The details of the medical society recommendations are not immediately important. The *Detroit Times*, backed by a score of informed groups, has been urging clinics to prevent crimes against children just as strongly as a parallel battle has been waged for adequate and decent care for all mentally ill.

Few could deny that a better law than the Goodrich Act could be enacted to cure or control deviates by using what is good of the old law, discarding the bad and bringing it into accord with the knowledge and needs of today.

The most important urging of the doctors of Michigan is speed: recognition that the situation must be deemed an emergency; that the lives and futures of Michigan children must be protected from mad criminals.

The State Legislature, now about to enter into special session, must be made to realize the urgency of the situation and, that like all other wars, the fight will cost money.

Scientists, social workers, law enforcement officials and all clear thinking individuals recognize the seriousness of the whole mental health problem.

Representative leaders in the governor's study commission are devoting themselves to the issue.

But final action will be delayed until the legislators of Michigan fully recognize that this is a problem which must be met NOW.

The Michigan State Medical Society is an association of informed and able men.

With their insight into the lives of the families of Michigan the doctors of the state know what is needed.

And their voice is strong enough to be heard.

Truly, the Michigan State Medical Society is a powerful ally in this struggle.—*Detroit Times*, January 11, 1950.

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MSMS County Secretaries-Public Relations Conference

Detroit, January 22, 1950

Attendance records were broken for the MSMS County Secretaries-Public Relations Conference on the occasion of the 1950 meeting on Sunday, January 22, at the Book-Cadillac Hotel, Detroit. Two hundred and six were in attendance and heard an intensely enlightening program presided over by W. F. Strong, M.D., Ontonagon, who served as chairman during the past year.

Congressman John B. Bennett of Ontonagon, Michigan, was the opening speaker on the day's very interesting program. His subject was "England's Dilemma." He was followed by an examination on socialized medicine, with L. Fernald Foster, M.D., Bay City, MSMS secretary, as "Quiz Master."

"To Your Health," the latest MSMS motion picture, followed on the program.

Roy W. Gifford of Detroit, past president of Borg-Warner International Corporation, was the noon-day dinner speaker. His down-to-earth talk was entitled "Foreign Aid—Success or Failure."

The afternoon session was highlighted by Congressman Gerald R. Ford, Jr., of Grand Rapids. who gave a speech on the congressional situation entitled "Americanism vs. Socialism." Professor Paul D. Bagwell of Lansing, head of the Department of Written and Spoken English at Michigan State College, followed with an hour of public speaking instruction.

The report on the morning examination, with grades, was given to all participants by Dr. Foster.

Ample time was given both in the morning and in the afternoon for audience participation.

William M. LeFevre, M.D., of Muskegon, longtime secretary of the Muskegon County Medical Society, was chosen as chairman of the County Society Secretaries for the ensuing year.

The 206 attendants were representative of the following groups:

County Secretaries.— J. E. Mahan, M.D., Allegan (Allegan); Harold Kessler, M.D., Alpena (Alpena-Alcona-Presque Isle); L. Fernald Foster, M.D., Bay City (Bay-Arenac-Iosco); Wesley G. Logan, M.D., Hastings (Barry); Harold R. Bodine, M.D., Battle Creek (Calhoun); G. T. Britton, M.D., Marcellus (Cass); S. R. Russell, M.D., St. Johns (Clinton); Donald F. LeMire, M.D., Escanaba (Delta-Schoolcraft); Ernest P. Griffin, Jr., M.D., Flint (Genesee); Donald G. Pike, M.D., Traverse City (Grand Traverse-Leelanau-Benzie); Leo R. Wickert, M.D., Mt. Pleasant (Gratiot-Isabella-Clare); Ira W. Wiggins, M.D., Jonesville (Hillsdale); Addison B. Aldrich, M.D., Houghton (Houghton-Baraga-Keweenaw); Arno W. Weiss, M.D., Bad Axe (Huron); G. D. Cummings, M.D., Lansing (Ingham); Robert E. Rice, M.D., Greenville (Ionia-Montcalm); H. W. Porter, M.D., Jackson (Jackson); G. H. Rigterink, M.D. (Kalamazoo); J. Russell Brink, M.D., Grand Rapids (Kent); James R. Doty, M.D., Lapeer (Lapeer); Ray M. Duffy, M.D., Pinckney (Livingston); D. Bruce Wiley, M.D., Utica (Macomb); John F. Konopa, M.D., Manistee (Manistee); James R. Acocks, M.D., Marquette (Marquette-Alger); John A. White, M.D., Big Rapids (Mecosta-Osceola-Lake); Stanley A. Stealy, M.D., Grayling (Medical Society of North Central Counties); Herman R. Brukardt, M.D., Menominee (Menominee); William M. LeFevre, M.D., Muskegon (Muskegon); J. M. Cook, M.D., Newaygo (Newaygo); O. R. MacKenzie, M.D., Walled Lake (Oakland); W. F. Strong, M.D., Ontonagon (Ontonagon); Robert Bucklin, M.D., Saginaw (Saginaw); E. W. Fitzgerald, M.D., Port Huron (St. Clair); Charles W. O'Dell, M.D., Three Rivers (St. Joseph); E. W. Blanchard, M.D., Deckerville (Sanilac); John Ralvea, M.D., Paw Paw (Van Buren); L. Dell Henry, M.D., Ann Arbor (Washtenaw); Charles J. Barone, M.D., Highland Park (Wayne); Gordon Tornberg, M.D., Cadillac (Wexford-Missaukee).

Executive Secretaries.—Sara M. Burgess, Flint (Genesee); Else Kolhede, Detroit (Wayne).

Officers and Members of the Council of the Michigan State Medical Society in attendance were:

Officers.—W. E. Barstow, M.D., St. Louis, President; C. E. Umphrey, M.D., Detroit, President-Elect; L. Fernald Foster, M.D., Bay City, Secretary; A. S. Brunk, M.D., Detroit, Treasurer; R. H. Baker, M.D., Pontiac, Speaker—House of Delegates; E. F. Sladek, M.D., Traverse City, Immediate-Past President. Also Executive Director Wm. J. Burns and Public Relations Counsel H. W. Brenneman, both of Lansing.

Councilors.—L. W. Hull, M.D., Detroit, 1st District; Wilfrid Haughey, M.D., Battle Creek, 3rd District; R. J. Hubbell, M.D., Kalamazoo, 4th District; H. B. Zemmer, M.D., Lapeer, 7th District; L. C. Harvie, M.D., Saginaw, 8th District; E. A. Oakes, M.D., Manistee, 9th District; F. H. Drummond, M.D., Kawkawlin, 10th District; C. A. Paukstis, M.D., Ludington, 11th District; A. H. Miller, M.D., Gladstone, 12th District; W. S. Jones, M.D., Menominee, 13th District; J. S. DeTar, M.D., Milan, 14th District; O. O. Beck, M.D., Birmingham, 15th District; E. A. Osius, M.D., Detroit, 16th District; W. B. Harm, M.D., Detroit, 17th District.

Editors.—Robert E. Fisher, M.D., Bay City (Bay County Medical Society News Letter); George A. Sherman, M.D., Lansing (Ingham County Medical Society Bulletin); Edward H. Heneveld, M.D., Muskegon (Muskegon County Medical Society Bulletin); R. D. Mudd, M.D., Saginaw (Saginaw County Medical Bulletin).

The sixteen Public Relations Committee representatives present were: Hugo Aach, M.D., Kalamazoo; A. F. Bliesmer, M.D., Berrien; L. Fernald Foster, M.D., Bay; W. G. Gamble, M.D., Bay; S. W. Hartwell, M.D., Muskegon; Leslie T. Henderson, M.D., Wayne; Felix J. Kemp, M.D., Oakland; J. J. Lightbody, M.D., Wayne; J. E. Livesay, M.D., Genesee; E. B. Miller, M.D., Manistee; Benjamin T. Montgomery, M.D., Chippewa-Mackinaw; C. Allen Payne, M.D., Kent; W. Z. Rundles, M.D., Genesee; G. B. Saltonstall, M.D., Northern Michigan; A. H. Steele, M.D., Van Buren; Arch Walls, M.D., Wayne.

Legislative Committee representatives present were: G. V. Conover, M.D., Genesee; E. D. King, M.D., Wayne.

Presidents and Presidents-elect of County Medical Societies who attended were: E. B. Johnson, M.D., Allegan;

(Continued on Page 406)

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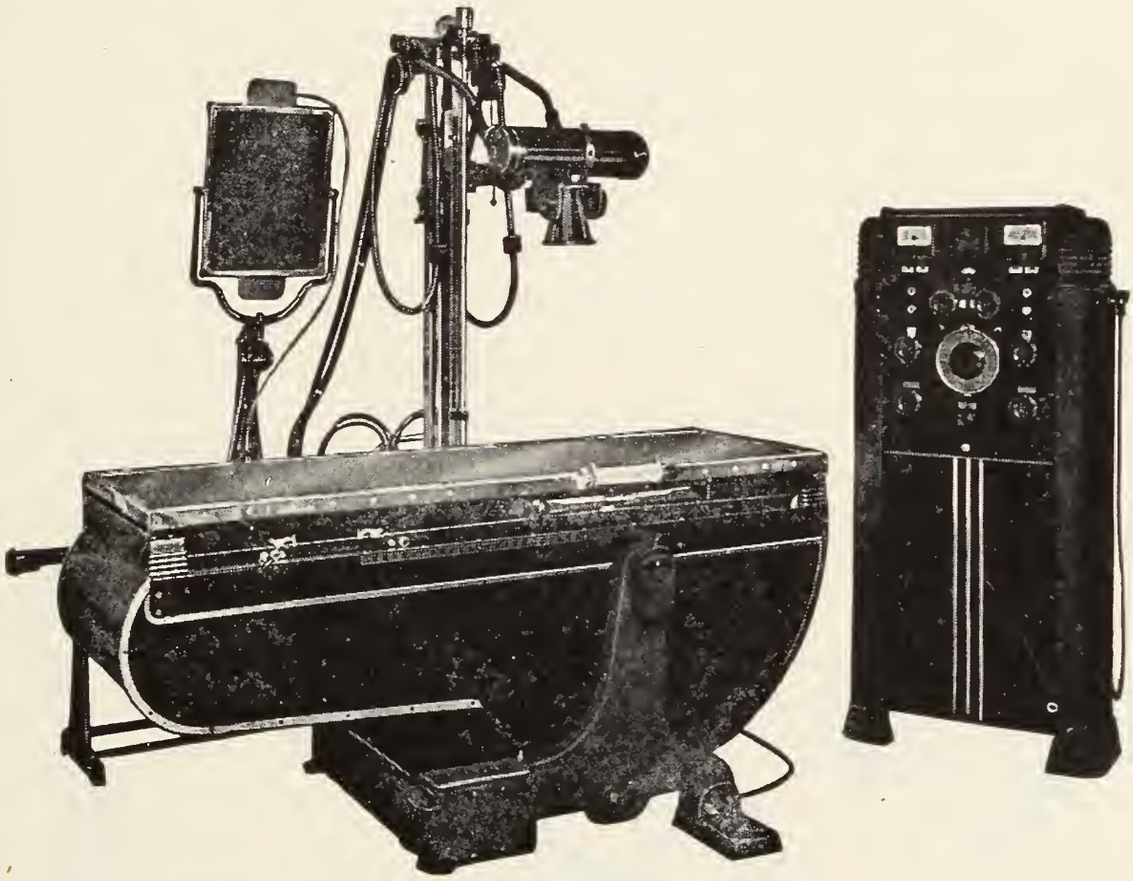

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(Continued from Page 404)

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Chairmen of County Societies Public Relations Committees who attended were: Robert J. Albi, M.D., Northern Michigan; Frederick J. Cady, M.D., Saginaw; Evan L. Copeland, M.D., Van Buren; Frank W. Garber, M.D., Muskegon; K. P. Hodges, M.D., Ingham; Albert B. Hodgman, M.D., Kalamazoo; Glenn W. House, M.D., Ionia-Montcalm; F. Pitkin Husted, M.D., Bay; T. J. Kane, M.D., Muskegon; J. Paul Klein, M.D., Newaygo; Philip T. Mulligan, M.D., Macomb; R. Wallace Teed, M.D., Washtenaw.

Other County Medical Society representatives included: Thomas G. Amos, M.D., Wayne; J. N. Asline, M.D., Bay; A. U. Axelson, M.D., Wayne; Robert S. Breakey, M.D., Ingham; Ronald E. Clarke, M.D., Wayne; W. J. Coulter, M.D., Wayne; Carleton Dean, M.D., Ingham; Harry F. Dibble, M.D., Wayne; C. H. Eisman, M.D., Wayne; John W. James, M.D., Saginaw; William T. McAlonan, M.D., Wayne; W. G. Mackersie, M.D., Wayne; Glenn E. Millard, M.D., Wayne; Esli T. Morden, M.D., Lenawee; Carl A. Peterson, M.D., Hillsdale; Carol Platz, M.D., Wayne; Edgar E. Poos, M.D., Wayne; R. J. St. Louis, M.D., Wayne, Harry E. Schneiter, M.D., Allegan; L. Paul Sonda, M.D., Wayne; Walter S. Stinson, M.D., Bay; Oscar D. Stryker, M.D., Macomb; G. C. Stucky, M.D., Eaton; E. C. Texter, M.D., Wayne; R. W. Ullrich, M.D., Macomb; Roger V. Walker, M.D., Wayne; D. R. Wright, M.D., Genesee; William J. Yott, M.D., Wayne.

Officers of the Woman's Auxiliary included: Mrs. Barbara K. Aach, Kalamazoo; Mrs. A. B. Aldrich, Hancock; Mrs. T. G. Amos, Detroit; Mrs. J. N. Asline, Essexville; Mrs. A. U. Axelson, Detroit; Mrs. Charles J. Barone, Detroit; Mrs. Harold R. Bodine, Battle Creek; Mrs. Robert Breakey, Lansing; Mrs. H. R. Brukardt, Menominee; Mrs. Robert V. Bucklin, Saginaw; Mrs. F. G. Buesser, Detroit; Mrs. F. J. Cady, Saginaw; Mrs. C. E. Crook, Ann Arbor; Mrs. Milton A. Darling, Detroit; Mrs. Carleton Dean, Lansing; Mrs. C. H. Eisman, Detroit; Mrs. W. L. Foster, Detroit; Mrs. W. G. Gamble, Bay City; Mrs. Frank Garber, Muskegon; Mrs. Ledru O. Geib, Grosse Pointe; Mrs. Floyd F. Gibbs, Grand Rapids; Mrs. Ernest P. Griffin, Jr., Flint; Mrs. Leslie Henderson, Detroit; Mrs. Betty Heneveld, Muskegon; Mrs. R. A. Hollands, Battle Creek; Mrs. F. Pitkin Husted, Bay City; Mrs. T. J. Kane, Muskegon; Mrs. Mary LeFevre, Muskegon; Mrs. R. M. Leitch, Union City; Mrs. E. F. Lewis, Jackson; Mrs. Jean E. Livesay, Flint; Mrs. W. T. McAlonan, Detroit; Mrs. William Mackersie, Detroit; Mrs. James E. Mahan, Allegan; Mrs. V. S. Mancuso, Detroit; Mrs. Bertha Medema, Muskegon; Mrs. Warren Mueller, Lansing; Mrs. C. W. O'Dell, Three Rivers; Mrs. Charles Paukstis, Ludington; Mrs. C. Allen Payne, Grand Rapids; Mrs. H. W. Porter, Jackson; Mrs. Frances Rigterink, Kalamazoo, Mrs. H. F. Sawyer, Pleasant Ridge; Mrs. Harry Schneiter, Allegan; Mrs. L. Paul Sonda, Detroit; Mrs. W. S. Stinson, Bay City; Mrs. Oscar Stryker, St. Clair Shores; Mrs. R. W. Teed, Ann Arbor; Mrs. Elmer C. Texter, Detroit; Mrs. R. W. Ullrich, Mt. Clemens; Mrs. Arno Weiss, Bad Axe; Mrs. Doris Whipple, Pigeon; Mrs. Joseph Witter, Detroit; Mrs. D. R. Wright, Flint.

Others present were: Louis J. Hirschman, M.D., Wayne, Past President of MSMS; Messrs. J. C. Ketchum, John W. Castellucci, L. G. Goodrich, and K. E. Trimm of Michigan Medical Service; Mr. Raymond W. Mody, Michigan Hospital Service; Paul D. Bagwell, Michigan State College and Mrs. Paul D. Bagwell; Mr. E. H. Wiard, Michigan Health Council; Capt. L. A. Potter, State Department of Health; Mr. Stuart A. Campbell and Mr. John Guy Miller, MSMS CAP Field Secretaries; Mr. J. Joseph Herbert, MSMS General Counsel; Allen Schoenfield, Detroit News; and Mr. Randolph Harrell of Mead-Johnson and Company, Evansville, Indiana.

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Issued Monthly Under the Direction of the Council

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Types of Diabetes Mellitus and Their Treatment

By Arthur R. Colwell, M.D.
Evanston, Illinois

IT SEEMS to me that the simplest way to approach the problems of treatment in diabetes mellitus is to realize that rarely are any two cases alike. Doctors who see only an occasional patient find it difficult to distinguish between various grades of severity of the disease and are inclined to treat all alike, with indifferent success and often some penalty. Whatever I may be able to contribute here will be based on the fact that I will try to outline the simplest possible effective methods of treatment for three major classes of diabetic problems. In so doing it must be conceded from the start, of course, that the diagnosis is established and proved diabetes mellitus is known to exist.

The three important classes into which all known diabetics fall are (1) *mild diabetes,* manageable by dietary methods, (2) *severe diabetes,* requiring insulin in addition, and (3) *acute complications,* requiring emergency methods of treating the diabetes.

Many chronic complications also occur in diabetic patients—these constitute a special problem which will not be discussed today.

Most authorities agree that it is desirable to control abnormal hyperglycemia and glycosuria insofar as possible without unendurable inconvenience to the patient and danger of severe shock from insulin. In some instances these two qualifications make it advisable to permit minimal or transient glycosuria as the lesser of two evils. But with proper care, the majority of diabetic patients can be maintained in approximately normal sugar balance without either of those penalties. This should be done whenever possible. The necessity for condoning some glycosuria in certain cases should not be permitted to encourage laxity of control in the majority. Established criteria for good routine management consist of the maintenance of normal nutrition and as good control of abnormal blood and urine sugar as possible without more serious penalties. The following description of therapeutic methods is based on this principle.

Presented at the Eighty-fourth Annual Session of the Michigan State Medical Society at Grand Rapids, September 21, 1949.
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Mild Diabetes: Dietary Control

Probably about one-half of all proved uncomplicated diabetes mellitus can be managed by restriction of the food intake. These patients usually are obese, in middle or advanced age, not diabetic for long and have not suffered much from the disease. They do not show excessively high sugar levels and develop acidosis only when acute complications exist. They never have used insulin or have used it only temporarily. When these characteristics are present, an effort to manage the diabetes by diet always should be made and often will be successful. Loss of excess weight is usually advisable in addition. Diet restriction, therefore, is doubly important. The use of insulin may prevent loss of weight by encouraging greater food consumption.

Three types of diet are suitable for this class of patients. The last two also are appropriate for maintenance of normal nutrition even though insulin is required.

1. Desugarizing.—When abnormal glycosuria and hyperglycemia exist, when the patient uses no insulin, and when no acute infection or ketonuria is present, desugarization by diet is indicated.

A desugarizing diet is one which will support normal weight at minimum activity, maintain protein balance, not cause ketonuria, and supply adequate accessory elements such as bulk, minerals, vitamins and water. It must be as low as possible in glucose value without conflicting with those requirements. It is the familiar low carbohydrate, moderate protein and high fat diet, containing meat, eggs, green vegetables, citrus fruits, milk, cream and butter. It contains no sweet nor starchy foods, of course, and relies for its caloric value largely on its protein and dairy food content. If body weight is excessive, it may also be restricted in fat to advantage.

2. *Maintenance.*—When desugarization has been accomplished, either by diet or by the adjunctive use of insulin, a diet is required which is capable of supporting normal weight and health at the optimum activity required by the patient. This must be as convenient and palatable as possible within the limitations imposed by the necessity for controlling the sugar balance and maintaining uniformity and accuracy of treatment. Conservative rules for the selection of such a diet may be outlined as follows:

Calories.—Age and activity are the most important factors governing the selection of a maintenance diet. Adults usually require from 25 to 40 calories per kg. per day. Lower amounts are needed by older and sedentary persons and more by the young and active. Heavy manual labor and children may demand as many as 50 calories per kg. Thin people and men need more, women and obese persons less. An average allowance for a young 160-pound adult would be 72 kg. times 35 calories or 2520 calories.

Protein.—At least one gram of protein per kg. per day is necessary for maintenance of normal nutrition. There is seldom any harm in giving more. Children need fully twice as much as adults, as a rule. The 160-pound adult selected above could thus be given 90 gm. protein daily. This would provide 360 calories, leaving 2160 to be supplied by carbohydrate and fat.

Carbohydrate: fat ratio.—Ratios of less than 1:1 in grams are unpalatable and may be ketogenic. Ratios of 3:2 and 2:1 are in common use. Probably the higher ratios, involving more generous amounts of carbohydrate, are more difficult to balance with or without insulin. They are, therefore, not used by the author except when special indications exist.

For practical purposes this means that a moderate amount of starchy food may be added to the diet used for desugarization. One or two slices of bread, a cereal or a starchy vegetable like potato may be added to each meal. The fat contained in the cream and butter should be retained unless excessive weight gain occurs or loss is desired.

After desugarization such a diet may be used indefinitely with or without insulin, depending on blood and urine sugar values caused by it.

3. *Weight Reduction.*—Either the desugarizing type of diet or the maintenance diet can be modified for purposes of reducing weight when required.

Reducing diets are planned in exactly the same manner as described for desugarization and maintenance, but the fat content is decreased arbitrarily, after planning the food values, to a level which will impose a caloric deficit. This forces the combustion of stored fats in amounts which approximate the deficit and preserves the total exogenous and endogenous fat combustion at the level and ratio planned originally, thereby insuring freedom from ketosis.

When the patient is overweight, the diet should be planned as if the excess weight were to be maintained and the fat reduced secondarily. This avoids prescription of diets which are accidentally ketogenic or sub-maintenance in protein. When the patient is underweight or normal, the diet should be planned to maintain the ideal weight, because excess calories and protein can do no harm.

Severe Diabetes: Use of Insulin

When dietary adjustment fails to produce good control of abnormal glycosuria and hyperglycemia without nutritional penalties, the routine use of insulin becomes necessary. The need for it usually is permanent, although borderline cases, in which its temporary use permits good control later without it, are not infrequent. On this account insulin should always be urged rather than to allow even minimal hyperglycemia. There are more important considerations than freedom from diabetic symptoms, chiefly those of islet damage and danger of infectious and vascular complications from persistent hyperglycemia.

Action of Insulin and Its Modifications.—To understand the proper use of various insulin preparations in routine management of diabetes mellitus, familiarity with the timing characteristics of insulin itself and its commonly used modifications is essential.

Unmodified insulin.—Regular insulin (solution of amorphous insulin) and crystalline insulin (solution of zinc insulin crystals) are almost identical in action. The effects of single large doses on glycemia and glycosuria are shown in Figure 1, in contrast with those of the most commonly used depot preparation, protamine zinc insulin. Their action is prompt, reaching a peak in about four hours, and intense and fairly brief, exhausting their effect in about twelve hours. For these reasons these unmodified preparations are most useful in emergencies and to supplement the depot insulins. In routine treatment they must be injected more than once daily (sometimes every six hours or so) in order to provide overlapping effect. For routine use they have been largely replaced by depot insulins with more sustained, less intense action.

Because their absorption rates do not depend upon any depot principle, the unmodified insulins are more uniform and dependable in effect than the longer-acting preparations. This is decidedly advantageous in the extremely severe, labile forms of diabetes seen chiefly among children and young adults where minor variations in the intensity of insulin effect often result in gross changes toward hypo- or hyperglycemia.

Protamine zinc insulin.—This is the most commonly used depot preparation. It is a suspension of amorphous crystals of insulin precipitated in combination with a monoprotamine (salmine) and zinc in a neutral, aqueous vehicle. Correct dosages are obtained only by thorough mixing of the suspension in its vehicle. After hypodermic injection insulin is released from its slowly soluble combination with the protamine and zinc, probably by enzymatic action. This is the "depot" effect.

Gradual, weak and prolonged reduction in glycemia and glycosuria follows the injection of each single dose, as shown in Figure 1. Since the action of large doses extends beyond twenty-four hours, daily injections overlap each other in effect, with the result that the response to any given daily dosage is not seen for several days. Accordingly, the response to changes or omission of its daily administration is not seen for days for the same reason.

Protamine zinc insulin is most useful in less severe forms of diabetes in which details of insulin timing are relatively unimportant and weak insulin effect is all that is required. This may be true even when large daily doses are required, due to "insulin insensitivity," or relative refractoriness for any reason.

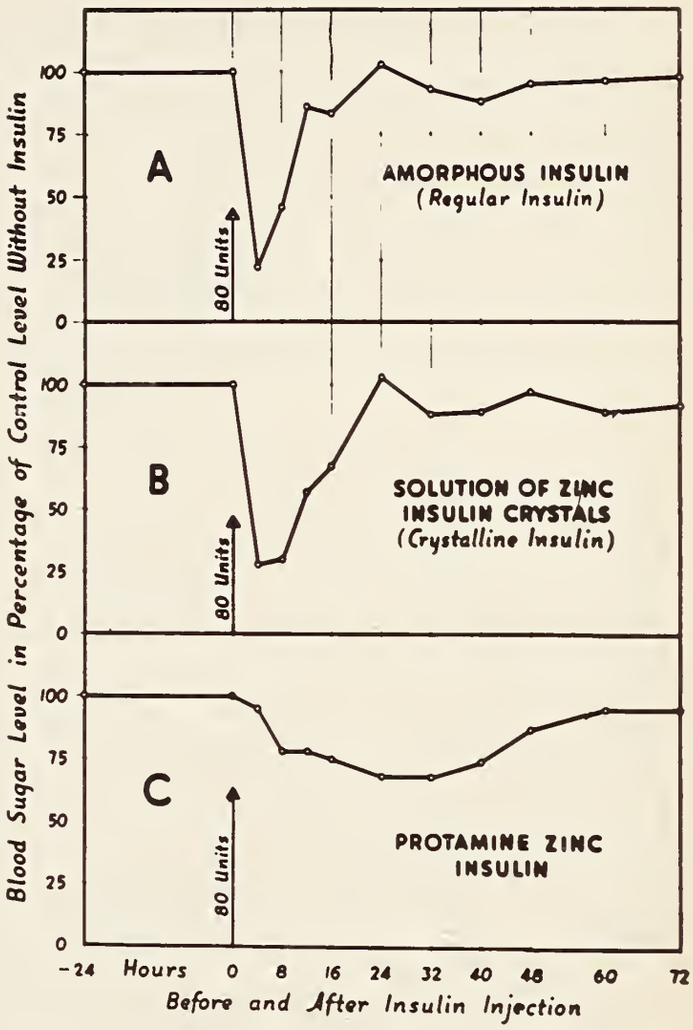

Fig. 1. Time action of single large doses of unmodified and protamine zinc insulin in diabetes of average severity.

Insulins with intermediate action.—During recent years some refinements in effective insulin therapy have become possible as a result of the development of insulin modifications with time-action intermediate between those of unmodified insulin and the original depot preparation, protamine zinc insulin. Neither the fast-acting nor the slow-acting standard insulin fits the needs of the patient with severe diabetes very well. Ordinary insulin must be injected several times daily. Even then its effect wanes so rapidly in severe diabetes that hyperglycemia and glycosuria occur during the hours of sleep, even without food. At the

other extreme, protamine zinc insulin is so weak and prolonged in effect that dosages sufficiently large to control the glycosuria which follows the meals are likely to cause severe insulin shock

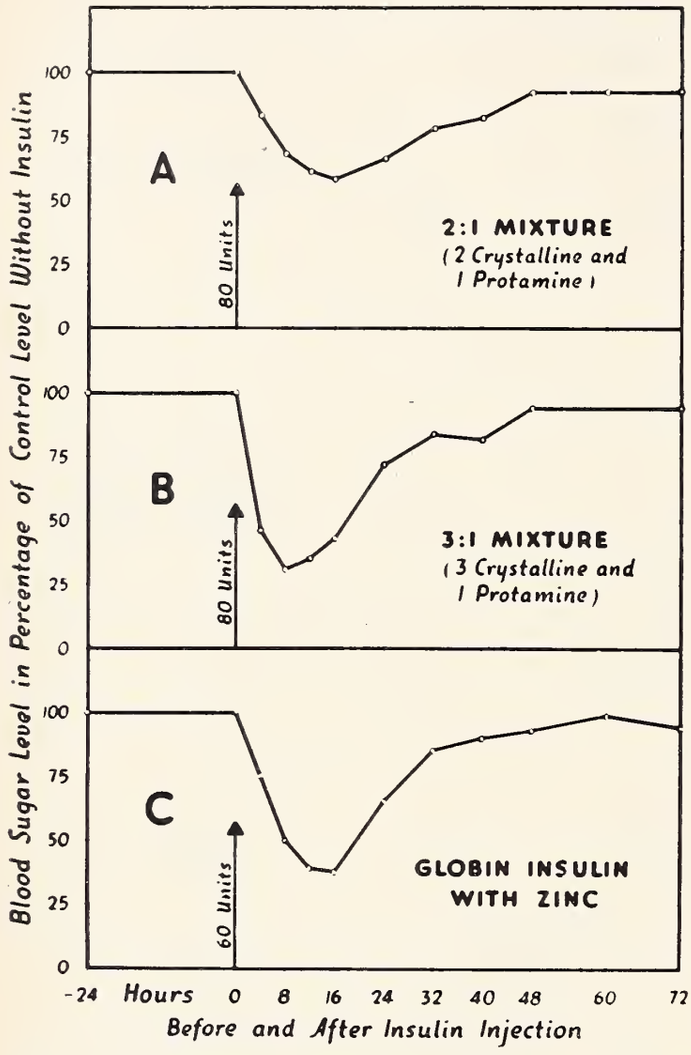

Fig. 2. Time action of single large doses of commonly used intermediate insulins in diabetes of average severity.

during hours of fasting, especially during sleep. In the past it has often been supplemented by separate injections of regular insulin for this reason. Small amounts of regular insulin added to larger amounts of protamine zinc insulin are precipitated by the excess protamine present and lose their identity.

Globin insulin with zinc is the only intermediate insulin sold at the present time. It is an acid aqueous solution of insulin in combination with beef globin and zinc. It is partially precipitated after injection, hence it has both a rapid and sustained effect. It is more rapid and less prolonged in action than protamine zinc insulin but less rapid and intense and decidedly more prolonged in action than unmodified insulin. The average response to a single large dose is shown in Figure 2 in comparison with two commonly used protamine insulin mixtures.

Protamine insulin mixtures containing excesses of unmodified insulin also possess time-action of an intermediate character. Thorough mixtures containing about twice as much regular or crystalline as protamine zinc insulin fit the needs of most severe diabetic patients. Occasionally the mixtures must contain three times as much insulin as protamine zinc insulin for best results. There is not much difference in the responses to single doses of globin insulin and a 2:1 mixture. Probably the latter preparation permits greater overlapping of depot effect in single daily dosage. A 3:1 mixture is decidedly more intense and less prolonged than either of the others.

These intermediate insulins are most appropriate when diabetes is so severe that: (1) fasting glycosuria and hyperglycemia follow the use of ordinary insulin; (2) glycosuria occurs with amounts of protamine insulin sufficiently large to control fasting hyperglycemia, or (3) nocturnal hypoglycemia and insulin shock are caused by amounts of protamine zinc insulin large enough to control glycosuria following meals.

There is not much choice between globin insulin and insulin mixtures. The chief advantage of the former is the fact that it can be used as marketed. The mixtures must be prepared in the ampoule or syringe from market supplies of their component parts. They possess the advantage of greater elasticity for individual needs by change in proportions. Greater overlapping of effect from the 2:1 mixture is also desirable in some patients. The choice between them depends on their appropriateness as determined by actual trial and comparison in individual patients.

A suspension of protamine insulin crystals containing about 40 per cent as much protamine as standard protamine zinc insulin ("NPH50") possesses time-activity comparable to those of the 2:1 mixture and globin insulin with zinc.

Diabetes of Moderate Severity.—When reduction of the food supply fails to control abnormal glycosuria and hyperglycemia and yet diabetes is judged not to be very severe, moderate doses of protamine zinc insulin are preferred. Daily injections before breakfast are given.

Dosages required usually range from about 10 to 40 units daily. Much more may be required by "insensitive" patients, even when their diabetes is inherently not very severe.

When the diet has been set at a maintenance level which is not extravagant in carbohydrate, and blood and urine sugar levels are persitently high, a trial daily dose of protamine zinc insulin should be injected, preferably for about one week, and the response observed. The fasting blood sugar concentration before breakfast measures this response most specifically, because it determines the peak action of the depot effect and warns of impending hypoglycemia. Post-prandial and twenty-four-hour glycosuria should also be observed because they may indicate the need for one of the intermediate depot insulins.

Adjustment of the dosage of protamine zinc insulin should be made (ordinarily at intervals of not less than three or four days) until the early morning blood sugar is approximately normal. If no glycosuria then occurs at any time of day, the balance may be considered satisfactory. Gradually progressive lowering of the fasting sugar level may then follow, due to slowly accumulating depot effects, exercise, or improvement in severity of the diabetic process. This requires subsequent reduction in dosage and may allow withdrawal of all insulin and satisfactory control by diet alone.

If any glycosuria follows meals in spite of the attainment of normal or subnormal fasting sugar levels, with protamine zinc insulin, redistribution of the food or insulin is necessary. When the disproportion between the day and night sugar levels is not great, correction of both is sometimes possible by transfer of carbohydrate foods from mealtime to a lunch at bedtime. The total carbohydrate of the diet can be reduced with the same result, along with a reduction in the size of the dose of protamine zinc insulin.

When the amount of glycosuria following meals is great or the nocturnal hypoglycemia severe, protamine zinc insulin should be discontinued and one of the intermediate depot preparations substituted.

Severe Diabetes.—As indicated above, diabetes is not infrequently so severe that rapid shifts in sugar balance occur with insulin preparations which do not efficiently fit the feeding and fasting needs of the patient. Some one-half of all insulin-treated patients fall into this category. Diabetes which has existed for a long time or which has developed early in life almost always behaves this way. Special insulin techniques are then required for best results. Selection of the most appropriate insulin often makes the difference between good health and some degree of disability.

The most common pattern in diabetes of this type is as follows: Without insulin, glycosuria is intense, symptoms severe and acidosis extremely likely to occur. With ordinary insulin, multiple daily injections are required for good control, including one during the normal hours of sleep. Fasting hyperglycemia is high unless a substantial dose of one of the depot insulins is used or ordinary insulin is given during the night. Protamine insulin in dosage great enough to reduce the early morning sugar level to normal permits heavy glycosuria to follow meals and yet it is likely to cause nocturnal hypoglycemia. The insulin requirement commonly ranges from 40 to 80 units daily, although exceptions may occur in insulin-sensitive individuals.

Diabetes so severe that these characteristics are present requires one of the depot insulins with intermediate action. Globin insulin or one of the protamine insulin mixtures containing at least twice as much insulin as protamine insulin often corrects the faults in timing of the standard preparations.

Globin insulin may stop both the post-prandial glycosuria and nocturnal hypoglycemia and yet preserve an approximately normal fasting level. It may cause insulin reactions at the time of its peak action (eight to sixteen hours after injection) or permit slighly high early morning levels due to inadequate overlapping. In that event the slightly less intense, more prolonged action of a 2:1 mixture is preferable.

On the other hand, if either of these insulins permits afternoon or evening glycosuria to occur in spite of daily doses large enough to reduce nocturnal glycemia to normal, an insulin with even more rapid action is required. A mixture containing 2½ or even 3 times as much insulin as protamine insulin is then needed. Diabetes of this type is unusual.

Labile ("Brittle") Diabetes.—A good many young (and some older) patients with diabetes of long standing exhibit a pattern which defies almost all attempts at perfect control of glycosuria without insulin shock. On ordinary programs of management they behave unpredictably. A constant diet and insulin regime permits sudden and unexpected shifts in glycemia from one extreme to the other for no apparent reason. These patients accept large waves of glycosuria alternating with severe insulin reactions with resignation and concern. Their number is increasing because of the

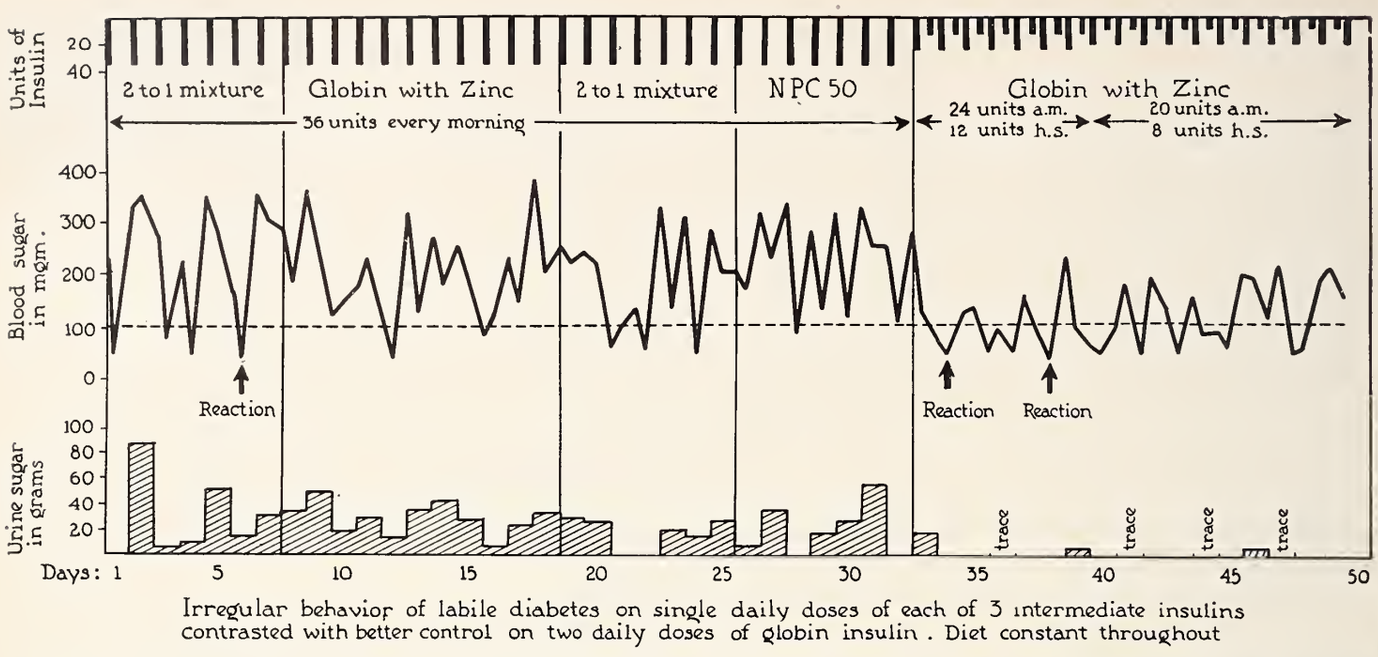

Fig. 3. Improvement in control of severe, labile diabetes when an intermediate insulin was given twice daily instead of once. Diet constant throughout.

lengthened life and greater duration of diabetes of young people with the disease.

A satisfactory balance is difficult to secure for these patients and sometimes impossible. Ordinarily some degree of glycosuria must be accepted as the lesser of two evils, the other being frequent insulin shock. Compromise with ordinary standards of control is inevitable in some cases. The most satisfactory criteria for treatment involve: first, maintenance of normal nutrition; second, freedom from diabetic symptoms and all ketonuria; third, elimination of severe reactions from insulin; and, finally, as little glycosuria as possible without great inconvenience in the diet or insulin routine.

With presently available methods of treatment, two specific plans are most satisfactory. Both take advantage of the fact that insulin modifications with sustained action are unpredictable in their intensity of overlapping effect. Modifications with more rapid action, injected more frequently, distribute their available insulin more uniformly and efficiently.

The most effective but also most inconvenient of these plans involves the injection of unmodified insulin three or four times daily, including an injection during the hours of sleep. Four doses of equal size given at approximately six-hour intervals along with feedings of equal value are capable of yielding good control even in the most difficult patients of this type. (The fact that this is possible appears to prove that the unpredictable behavior is due to inconstant rates of insulin release inherent in all depot insulins given at longer intervals). The regime is so arduous that few patients can adhere to it for long. The two nighttime doses may be replaced by one dose of an intermediate preparation with less inconvenience but also with less consistent control.

The most satisfactory plan (which compromises between convenience and perfect control) involves the use of one of the intermediate insulins twice daily. Figure 3 shows the improved control secured in one brittle case when this technique was substituted for one larger dose given once daily.

Specifically, the method requires that the total daily insulin dose be divided into a larger dose (from two-thirds to three-quarters of the total) before breakfast and a smaller dose (from one-third to one-quarter of the total) at bedtime, along with a small lunch. Shifts in balance are minimized by this method. Slightly smaller amounts of insulin are needed, probably because of greater efficiency. The exact timing of the insulin is not important, provided one of the intermediate modifications is used. The effect of the morning dose is judged by the sugar levels in the late afternoon and evening—of the night dose, by the levels before and after breakfast. Redistribution of food often improves the results after uniform patterns of insulin are apparent.

Acute Complications: Emergency Treatment

The most effective treatment of diabetes mellitus during acute complications differs radically from that applied routinely. The reason for this

is that haste is essential. Acute illness puts sugar metabolism out of control; this, in turn, aggravates the illness, which again affects the diabetes adversely. This effect is illustrated clearly in

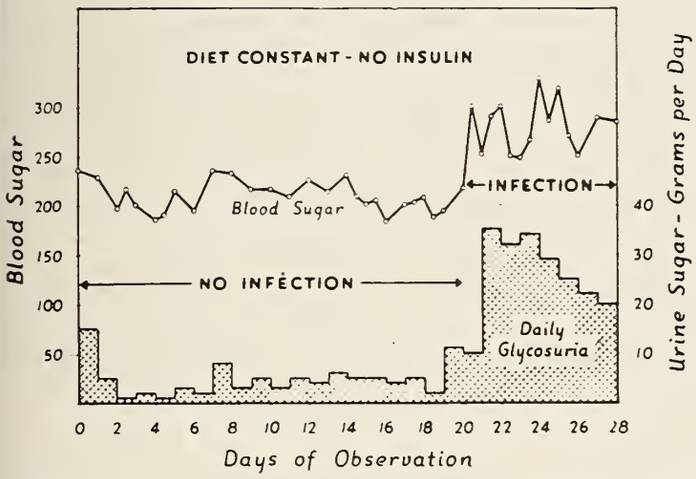

Fig. 4. Effect of acute infection on blood and urine sugar levels in mild diabetes.

Figure 4. The vicious cycle thus initiated by acute disease cannot ordinarily be treated aggressively by routine methods involving diet adjustment and slowly acting insulins. Special methods must be applied which depend primarily on the use of ordinary insulin at frequent intervals.

Acute diseases which most frequently demand vigorous treatment by quickly effective methods are acidosis, acute infection, surgical interference and trauma. All of these except severe forms of acidosis can be managed easily by a rational method of using ordinary insulin. The treatment of precomatose and comatose states will, therefore, be considered separately.

Six-hour Emergency Management.—When heavy glycosuria, with or without ketonuria, exists as a result of any acute illness, it can be eliminated within twenty-four hours, as a rule, by judicious adjunctive use of ordinary insulin at six-hour intervals, together with six-hour tests and feedings of uniform size. The method, devised by Woodyatt and used by many of his pupils and patients, is simple, effective, and easy to understand and apply for quick adjustment during changing conditions. It may be used in mild acidosis without symptoms, during acute infection if the sugar balance is disturbed, before operations if quick control is essential, and after operations, anesthesia or severe injuries which result in abnormal hyperglycemia and glycosuria. In principle it involves: (1) feedings of equal glucose value every six hours, night and day; (2) tests of the urine for sugar about six hours after each of these feedings; (3) injections of unmodified insulin every six hours, after each test and before each next feeding, the size of each

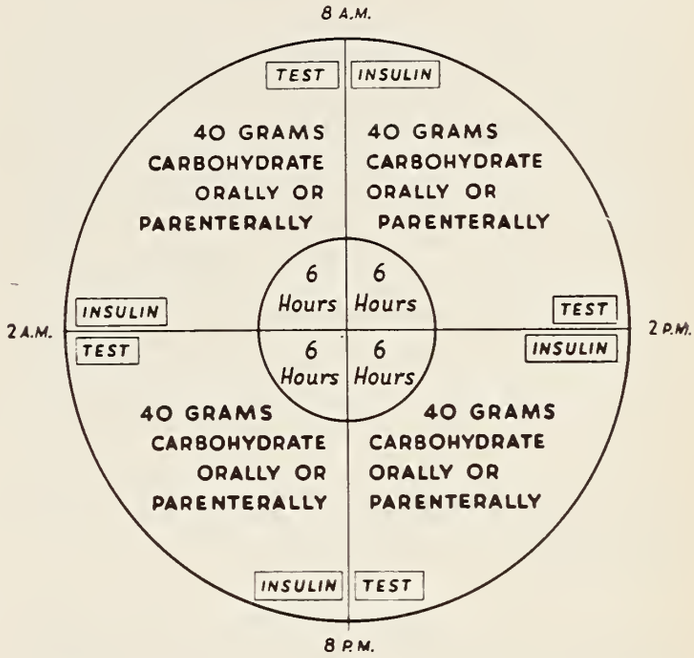

Fig. 5. Emergency management of diabetes during acute complications by injections of unmodified insulin at 6-hour intervals, constant carbohydrate supply and 6-hour urine tests which determine subsequent insulin dosage.

dose determined by the response to the previous injection. Figure 5 outlines the methods in diagrammatic form.

Feedings.—In order that the supply of sugar may be constant and, therefore, ignored as a possible variable affecting the sugar balance, a meal, series of feedings or parenteral injection of uniform glucose value is given every six hours throughout each twenty-four hour period. For adults, feedings of 40 grams glucose value are most convenient. This value may be lowered or raised, if desired, for any given patient, but it should be maintained at a uniform level, both day and night, after it is selected in any one case, unless insulin shock demands extra sugar temporarily.

The alimentary capacity of the patient naturally determines the choice of individual feedings. During vomiting and immediately pre- and post-operatively, glucose or glucose-amino acid solutions should be injected hypodermically or intravenously. By vein they should be injected at slow rates which will not flood the tissues and create transient waves of glycosuria. Five per cent solutions given at rates of 2 to 3 c.c. per minute will not do this. Sick persons with anorexia can be given liquid

feedings in divided doses at rates which will supply uniform amounts of sugar every six hours. With normal appetites the entire feeding can be taken in a substantial meal every six hours, except during the night when a single liquid is preferable.

Tests.—About six hours after the beginning of each feeding period the urine is tested for sugar. Greatest accuracy in judging the need for insulin results from tests of small specimens obtained shortly after previous emptying of the bladder near the end of the period. Bladder retention must be avoided. The urine is tested immediately, by any qualitative method, by the patient, attendant or nurse. The result determines the size of the next dose of insulin. Blood sugar analysis is unnecessary and not expedient because of time limitations. In retrospect it aids in decisions about insulin, particularly when excessive, but it is not indispensible for effective results.

Insulin.—Unmodified (regular or crystalline) insulin must be used exclusively for quick regulation. The size of the initial dose is determined by the severity of the diabetes, previous use of depot insulins, average daily requirement of the patient and intensity of the complicating illness. Ordinarily, from 10 to 20 units are given initially except in severe illness or resistant cases, when 40 units or more can be used safely.

The effect of the initial dose and each subsequent one can be judged by the test on urine secreted four to six hours after injection. If the test is heavy, a substantial increase should be made in the next dose. If the sugar clears rapidly as a result of the previous injection, the dose should be repeated or lowered slightly. If hypoglycemia results, the dose should be reduced decisively. The size of repeated doses is adjusted according to these rules until an amount is determined, by trial and error, which, when given repeatedly, maintains the urine approximately free from sugar without causing insulin reactions or hypoglycemia. This maintenance dose can then be given, along with the uniform feedings, as long as the complication exists. Minor adjustments can be made as the insulin requirement changes.

The success of this method of using insulin depends on a number of factors. The sugar supply must be uniform, day and night. Trial and error determines the insulin needed by each patient. The six-hour interval must be maintained continuously for feedings, tests and insulin. No single dose of insulin can be omitted, even if no food is taken, without affecting the reliability of the method, because serious dislocation of overlapping effects thereby is introduced. Finally, depot insulins should not be adjusted while this method is in operation. If used previously, they should be continued in the same dosage and the need satisfied by the insulin supplement. If not used previously, they should not be started until the daily requirement of the patient can be estimated and routine management begun. Their adjustment during emergencies introduces a variable which only makes decisions regarding the six-hour dosage of supplementary insulin more difficult.

Advanced Diabetic Acidosis (Precomatose and Comatose States).—It must be appreciated that the therapeutic methods described in this section are applicable only when ketogenic acidosis exists in an advanced stage. Undoubtedly the most serious emergency caused by diabetes mellitus and usually dramatically responsive to proper treatment, the severe form of acidosis accompanied by vomiting, breathlessness and stupor calls for aggressive treatment. Milder stages of acidosis with ketonuria but without typical symptoms should be stopped by the more gentle method just described. Unconsciousness in diabetes caused by complications other than acidosis (viz., cerebral and cardiac vascular accidents, trauma, insulin shock, alcohol) should be distinguished carefully from diabetic coma and precoma and treated by appropriate methods. Strenuous therapy, as used for severe acidosis, can be disastrous if applied in mild acidosis or other forms of coma not due to acid intoxication.

In the order of their greatest importance, the useful therapeutic weapons are unmodified insulin in large doses at frequent intervals, parenteral fluids, glucose, salt replacement, and plasma and circulatory sitmulants on occasion.

Insulin.—Only unmodified insulin should be used. Depot insulins serve no useful purpose in the emergency, although there is some advantage in not stopping them if used previously. Ordinary insulin must be given without delay in large doses at intervals of not more than six hours. The prompt administration of a decisively large dose often is of life-saving importance because time

runs out. Other agents used in treatment are of no importance if too little insulin is used too late or if effective insulin is allowed to fade by long intervals between doses.

The size of the initial dosage depends on the size and condition of the patient. In adults with vomiting, moderate breathlessness and drowsiness, alkali reserve readings in the vicinity of 20 to 30 volumes per cent, an initial dose of 40 to 80 units is indicated. Twice as much should be given initially if extreme air hunger and deep stupor are present and the blood pressure, pulse and urine output are not critically affected. True coma usually does not exist up to this stage. After circulatory collapse has begun, with cyanosis, coldness, rapid pulse, low blood pressure, oliguria or anuria and failing respiration, all treatment is usually ineffective unless several hundred units are given immediately, at least one-half by vein, and circulatory efficiency is restored by other supportive measures. In children this suggested dosage scale should be revised according to body weight. If severe infection accompanies advanced acidosis, dosages should be doubled, at least.

The only dependable rule dictates that *enough insulin should be given to stop the progress of the acid intoxication* without causing violent insulin shock. Ordinary doses are ineffective and massive doses not to be feared if the patient is critically ill. Insulin shock can be prevented by glucose administration as required: therefore, it is better to err by giving too much than too little.

The patient's response to the insulin given initially determines the size of subsequent dosage. If irreversible parenchymatous damage has not occurred, effective insulin is indicated primarily by improvement in respiratory distress in three to five hours. Abrupt decreases in preceding diuresis and high sugar levels give confirmatory proof of adequate insulin and warn of danger of hypoglycemia. These usually occur later and are of less value as early guides than the rate and depth of breathing. If no improvement is seen within the first three to five hours, the initial dosage must be considered ineffective and larger amounts given promptly and watched as before. Single large doses are more rapidly effective and more easily evaluated than multiple small doses at short intervals. Under no circumstances should more than six hours elapse before additional insulin is given, even after massive initial amounts with favorable response.

After improvement occurs, an injection of insulin should be given every six hours, day and night, according to the principles outlined previously for the six-hour emergency method. A massive dose can be repeated, if seen to be effective, until excessive polyuria, glycosuria and ketonuria have been stopped. Thereafter it can be halved every six hours, provided increasing glycosuria does not recur, until ordinary maintenance doses of 50 to 100 units daily (12 to 24 units every six hours) prevent excessive glycosuria without causing hypoglycemia. Routine feeding and depot insulin control can then be resumed, as described previously. Patients who have come out of severe acidosis seldom can be maintained on less than 40 units of insulin daily. They usually require more.

Fluids.—Because of vomiting and diuresis, extreme dehydration always exists in advanced diabetic acidosis. Its correction is secondary in importance only to sufficient insulin.

During the first day of treatment at least three liters of water must be given to the adult of average size. Four to six liters are probably better, although cardiac and gastric dilatation can occur readily by administration rates which are too rapid.

If anuria exists, fluids should be given as 5 per cent glucose to protect against insulin shock from large doses. If the urine output is satisfactory, 1/6 molar sodium lactate or normal salt (without glucose) can be used as long as heavy glycosuria is known to exist by frequent testing of catheterized specimens. Delay in giving glucose helps to rehydrate the subject more rapidly because glycosuria and diuresis, which are excessive at first, are not increased by glucose, which is wasted. Abrupt fall in urine volume or sugar demands prompt use of glucose solutions to prevent insulin shock.

Not enough fluid can be given in early stages by routes other than parenteral ones because of vomiting and stupor.

Glucose.—After heavy glycosuria and polyuria decrease as a result of insulin, glucose with or without amino acids should be given in solution parenterally until food and fluids can be taken by mouth. About 40 grams every six hours represents a useful and convenient rate. It can be increased temporarily if hypoglycemia threatens. It is highly desirable to give enough to reproduce glycosuria when the urine clears suddenly due to large amounts of insulin. The 40 grams per six-hour rate

can then be resumed when a moderate insulin dosage scale is approached. This can be given by mouth, as soon as alimentary capacity permits, by a choice of feedings with 40 grams glucose value.

Salt replacement.—Vomiting and diuresis result in significant losses of mineral elements from the body which must be replaced. Sodium, phosphorus and potassium have been shown to be of greatest importance in this respect.

Sodium should be given in 20 to 40 gram amounts parenterally during the first day as normal saline or 1/6 molar sodium lactate solution. At least 2 grams of potassium should be given in addition if any signs of hypopotassemia exist (extreme muscular weakness, respiratory embarrassment, low blood potassium level). Phosphates are excreted in large amounts in acidosis and are necessary for normal sugar utilization. Probably they should be given routinely along with sodium and water.

Circulatory support.—When diabetic subjects in acidosis are first seen very late in the course of the acid poisoning, an unavoidably high mortality rate is inevitable. Characteristic of this terminal stage are cyanosis, hypotension, rapid thready pulse, coldness, anuria, shallow respiration, and plasma carbon dioxide combining power below 10 volumes per cent. Recovery from this condition is possible only if the shock-like state can be restored towards normal, even though all other methods of treatment are carried out with meticulous thoroughness.

Two or three units of blood plasma given intravenously may restore adequate circulation. Other fluids in large amounts are indispensable. External heat should be used. Circulatory stimulants such as caffeine, camphor and even digitalis sometimes appear to help. Epinephrine should not be used. If the circulation cannot be improved by these or other methods, the outcome is usually fatal. In borderline situations in which it can, the use of those methods, along with heroic treatment of the acidosis, represents the difference between success and failure of treatment.

636 Church St.

MSMS

UMW to resume medical and hospital benefits promptly. Signing of the new coal contract probably will allow the UMW Welfare Fund to resume medical and hospital benefits promptly, according to Dr. Warren F. Draper, executive medical director of the fund, which stopped payments last September. Under the new contract the fund's royalty goes from 20 to 30 cents per ton.

Scalp Traction in Management of Cephalic Presentation with Hydrocephalus

Milton Michael Rozan, M.D.
Lansing, Michigan

TO MY KNOWLEDGE, the use of scalp traction in handling cephalic presentation with hydrocephalus, as demonstrated in the following case report, has not been described in the literature. The procedure seems so simple and logical that it was thought worthwhile reporting.

Case Report

Mrs. B. S., aged twenty. Gravida 1, para 0. Last menstrual period, April 12, 1948. Estimated date of confinement, January 19, 1949. Family history negative. Past history: appendectomy, December, 1947. Catamenia: onset at age of twelve, twenty-eight day cycle, lasting six days, moderate on the first day.

Course of pregnancy uneventful. Hydrocephalus was detected by her family physician January 14, 1949. Confirmed by x-ray January 15. The patient was seen in consultation January 23, five days after membranes had ruptured. Medical induction of labor had been done the day previously.

General physical examination was negative. Blood pressure, 120/76. Urine negative. Hemoglobin, 12 gm. Red blood cells, 3,800,000. Type A. Rh positive.

Abdominal examination: Term pregnancy, OLT, with a very large hydrocephalic head felt in the lower abdomen.

Rectal examination: Cervix admitted one finger. Pains irregular.

Expectant treatment was advised until there was sufficient dilatation to permit craniotomy.

The progress of labor was very slow. Thirty-six hours after the onset of labor, vaginal examination revealed the cervix to be effaced and 3 cm. dilated, with sutures widely separated. A 17-gauge spinal needle was introduced and 650 c.c. cerebrospinal fluid removed. A Willits clamp was applied to the scalp and the patient returned to bed where traction was applied in the routine manner. Treatment was begun with antibiotics. Twelve hours later (after forty-eight hours of labor) the patient had a chill, with temperature of 103.2° and pulse 120. Cervix 8 cm. dilated. The patient had been well sedated during labor, and the fluid balance had been maintained with intravenous fluids. She was taken to the delivery room where craniotomy was performed, the cranioclast was applied and the baby delivered without difficulty. The baby also had a marked spina bifida. The placental stage was uneventful. Temperature rapidly returned to normal. The postpartum course was uneventful. Anti-

(Continued on Page 470)

Rickettsial Disease in Michigan

Report of Two Cases

By Charley J. Smyth, M.D.
Eloise, Michigan

ROCKY MOUNTAIN spotted fever, so named because it was first recognized in that section of the United States, is an acute infectious disease caused by a bacterium-like microorganism *Dermacentrovens rickettsi* which is transmitted to humans by the bite of an infected tick. It is the most common rickettsial disease occurring in this country and is characterized by a sudden onset, a high sustained fever, mental disturbances, profound prostration and a rash.

For a number of years it was thought that in North America this disease was limited in distribution to the States of the Northwest. However, a recent survey by Dyer has reported that cases of spotted fever have been reported in the literature from forty-one of the forty-eight states. According to this author, no confirmed cases have as yet been reported as originating in the states of Maine, New Hampshire, Vermont, Connecticut, Rhode Island, Wisconsin, or Michigan.

In September, 1941, within two days a man and wife were admitted to the William J. Seymour Hospital, Eloise, Michigan. This couple were itinerate actors and had traveled eastward across the northwestern and midwestern states in an automobile trailer during the months of April through August, 1941. In the first week of April they were in Vancouver, British Columbia; later in the same month they were employed in Seattle, Tacoma and Spokane, Washington, and in Portland, Oregon. During May they appeared in Salt Lake City and Provo, Utah, and in June in Casper, Wyoming, and Denver, Colorado. They spent the month of July in Kansas City. Following a two-week stop in Toledo, Ohio, they arrived in Michigan and were employed as entertainers in Detroit and Lansing until the onset of their illness. During these months they lived in their automobile trailer home with their two trained dogs which were a part of their act. The dogs were considered valuable, and these individuals were almost constantly in close contact with them.

From the Department of Medicine, Wayne University College of Medicine, Detroit, and the Wayne County General Hospital, Eloise, Michigan.

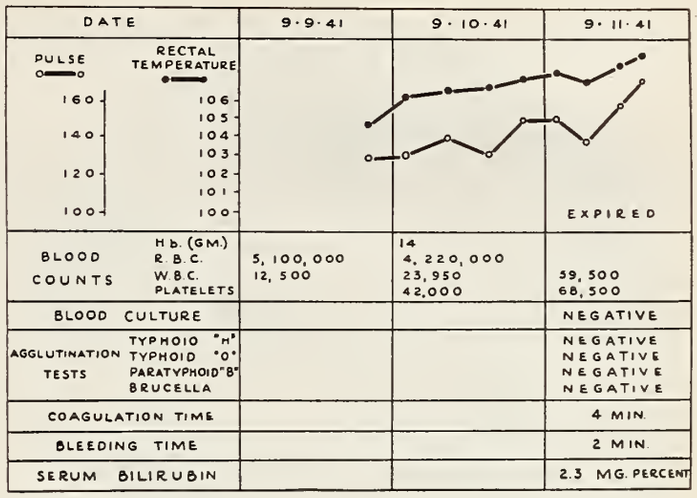

Fig. 1. *Case 1.* C.S., aged twenty-nine.

Both of these patients presented the typical clinical features of a rickettsial disease and were considered by us as having Rocky Mountain spotted fever. Members of both the Michigan Department of Health and the Detroit Health Department, who saw and examined these patients, concurred in this opinion. In tissue sections, from one of the patient's examinations in the Michigan Department of Health laboratories and in the laboratory of this hospital, rickettsia were observed. The lesions seen were considered to be due to Rocky Mountain spotted fever. We were unable to establish a virus etiology by serological tests in laboratory animals, and therefore an absolute diagnosis in these cases was not established.

The purpose of this communication is to present these two fatal cases of probable Rocky Mountain spotted fever which I believe are the first to be reported from Michigan. Because of modern high-speed transportation, sections of the country once widely separated geographically are now brought closer together. Therefore, Rocky Mountain spotted fever which originally was limited to the northwestern section of our country has now been recognized in yet another state which until now had been free from this disease.

Case Reports

Case 1.—C. S. (Fig. 1), a white married woman, aged twenty-nine years, was brought by her husband to the William J. Seymour Hospital September 9, 1941, from their trailer home in Dearborn, Michigan. Ten days before admission she developed a severe non-bloody diarrhea. A few days later she began to have chills and fever, complained of severe headache and had to go to bed. Three days prior to admission she became disoriented and was found wandering aimlessly about the trailer camp. During the next two days she became progressively more irrational and stuporous.

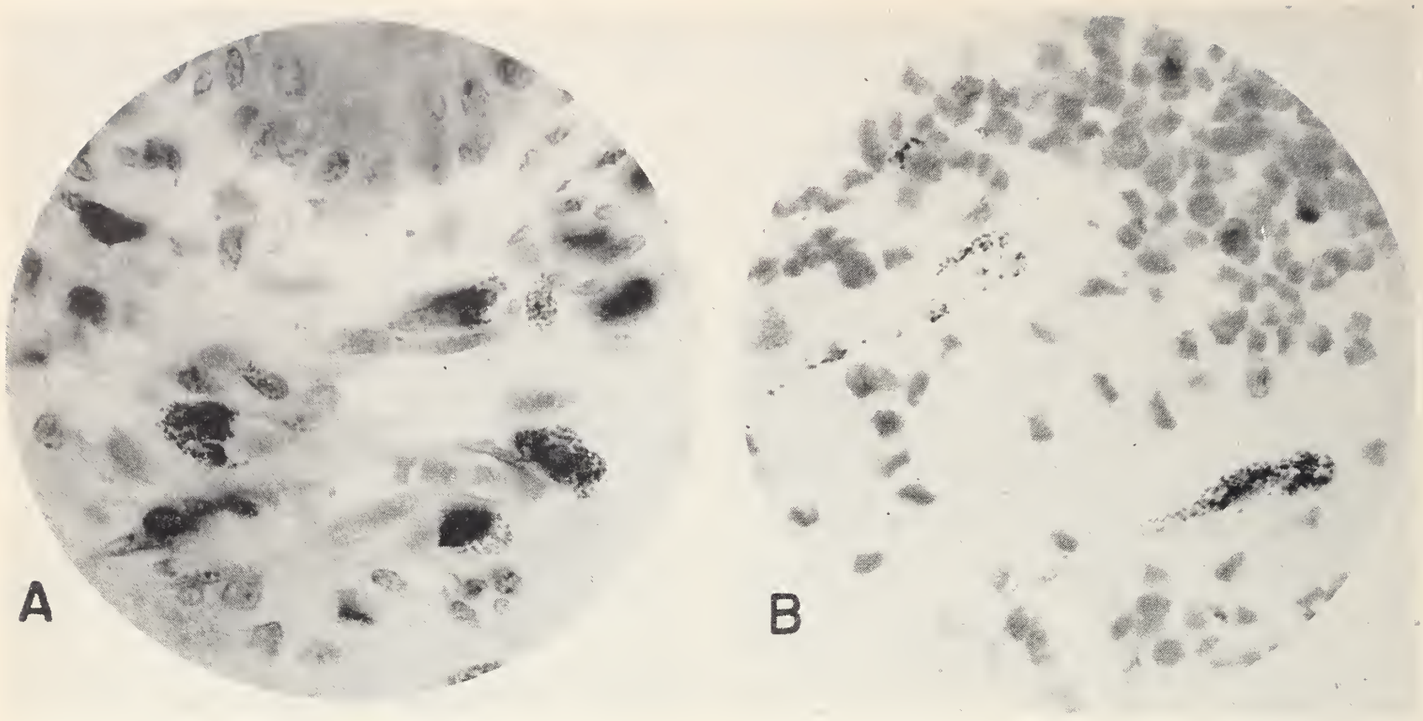

Fig. 2. Sections of skin obtained at autopsy from Case 1. (A) Intracellular organisms are shown in this photomicrograph (x750) as multiple black dots. (B) Large phagocytic cell containing many organisms and others lying outside the cells (x750).

Examination at the time of admission revealed the patient to be a well-developed, well-nourished white female appearing her stated age, acutely ill, disoriented and delirious. The skin was dry and warm with a generalized rose to purple colored macular rash. On the arms and legs there were numerous small petechiae. The conjunctivae were markedly congested and slightly icteric. The pupils were equal, regular and reacted to light. The ocular fundi were negative. The tongue was dry and red. There were small petechiae on the buccal mucous membrane. The pharynx was injected and the posterior wall was covered with a muco-purulent exudate. The neck revealed no rigidity. The heart and lungs were negative. There was no spasm of the abdominal muscles, and no organs or masses were palpable. There was a gross tremor of the arms and hands and extreme tenderness of the calf muscles bilaterally. The reflexes were physiological.

On the first hospital day the white blood cell count was 12,500 per cu. mm. and the red blood cell count was 5,100,000 per cu. mm. The following day the hemoglobin was 14 gm. per cent, white blood cell count 23,950 per cu. mm., red blood cell count 4,220,000 per cu. mm., and the blood platelets 42,000 per cu. mm. On the third hospital day, which was the day of death, the white blood cell count increased to 59,500 per cu. mm. and the platelets were 68,500 per cu. mm. The blood Kline reaction was negative.

Because of the sudden onset of the illness with chills, intense headache, prostration, high temperature and diarrhea, the patient was suspected of having an overwhelming infection and was therefore placed in isolation and on stool precautions. A blood culture and agglutination tests for typhoid, paratyphoid and Brucella were done on the third hospital day and were all negative. The presence of purpura and thrombocytopenia made us suspect a hemorrhagic blood disease; however, this possibility was eliminated when it was determined that the bleeding time was 2 minutes and the coagulation time 4 minutes. No agglutination tests for the rickettsial group of diseases were done. A roentgenogram of the chest taken on the third hospital day revealed areas of pneumonitis throughout the lower halves of both lung fields.

Treatment consisted of an intravenous injection of 1,000 c.c. of 5 per cent glucose solution soon after admission and a similar infusion twice daily during the next two days. A transfusion of 250 c.c. of whole blood was given on the third hospital day, and intravenous sodium sulfathiazole was started. However, only an initial dose of 4 grams and a single 1 gram dose were administered before the patient expired.

An autopsy examination was performed at the Wayne County Morgue by the coroner. There was marked generalized congestion of all organs and bronchopneumonia in the lower lobes of both lungs. A few hemorrhages were noted in the meninges of the brain and the brain substance. Tissue sections were prepared for microscopic study in the Eloise Hospital Laboratory, and sample sections were submitted to the Michigan Department of Health laboratories. The following report was received: "Throughout almost all of the tissues submitted, there is prolipheration and degeneration of the endothelial lining of the blood vessels. Many of the cells are swollen and vascular thrombi are found. There is an extensive degenerative process involving the spleen, liver and tubular epithelium of the kidneys. Focal areas of round cell infiltration are found in the liver. Intra- and extra-cellular rickettsia are demonstrated, particularly well in the skin sections (Fig. 2). The lack of focal lesions in the material from the brain, and the location of the lesions seen, suggest that this is Rocky Mountain spotted fever rather than typhus." Sample tissue sections from this

patient were also sent to the National Institute of Health, and Dr. T. L. Perrin returned the following report: "The lesions found in the sectioned tissue in the above cases were not inconsistent with a diagnosis of Rocky Mountain spotted fever, but they were not characteristic."

Case 2.—P. S., a white man, aged thirty-three (Fig. 3). When officers went to the trailer camp to notify the husband of his wife's death, he was found in bed acutely ill. His friends said that for a few days he had, at times, appeared confused. He had, however, seemed well at the time that he brought his wife to the hospital three days before, and when he visited her the following day. Questioning him revealed that for several days he had had frequent liquid stools which contained no blood or mucus. He had experienced several chills that day, felt feverish and complained of a productive cough. He had also had pain in the chest and an intense headache. He was therefore brought to the hospital.

He was a well-developed, obese, white male who was obviously acutely ill, irrational at times, covered with perspiration and having periodic chills. His entire body, except for the face, was covered with a red maculopapular rash. The lesions varied in size from 1 to 15 mm. in diameter, were discrete and faded with pressure. On the inner aspect of the mid-thigh was an irregular ecchymotic area measuring 2 by 4 cm. The conjunctivae were intensely congested and edematous. The pupils were dilated, round, regular and reacted to light and were in accommodation. The optic fundi were normal. The tongue was coated and dry. The chest was negative except for slight diminution of vocal fremitus at the base of the left lung. The heart was negative. The blood pressure was 136 systolic and 76 diastolic. Examination of the abdomen revealed the liver to be palpable 5 cm. below the right costal margin. The genitalia were normal. The reflexes were physiological.

The rectal temperature remained continuously high at a level of about 105° F. He was restless and became progressively more irrational; at times he had auditory hallucinations. On the third hospital day a marked tremor of the lips, tongue and extremities developed; the eruption became more pronounced and was redder in color with many purpuric spots.

During the first two days in the hospital he passed many loose non-bloody stools, and on the next day the abdomen was noted to be markedly distended and tympanitic. This was followed by vomiting which persisted until death on the fourth day after admission.

Because of the unexplained diarrhea this patient received sulfaguanidine 8 gm. on the day of admission and 12 gm. daily on each subsequent day. A transfusion of 250 c.c. of whole blood was given on the day of admission and 500 c.c. on the third hospital day. The daily fluid intake was supplemented by intravenous 5 per cent glucose solution.

An autopsy was performed eleven hours after death by Dr. S. E. Gould, Wayne County General Hospital pathologist. The skin showed marked lividity with scattered hemorrhagic spots in the skin of the right thigh. The conjunctivae were deeply injected. Both lungs were markedly congested, and the bronchi were filled with

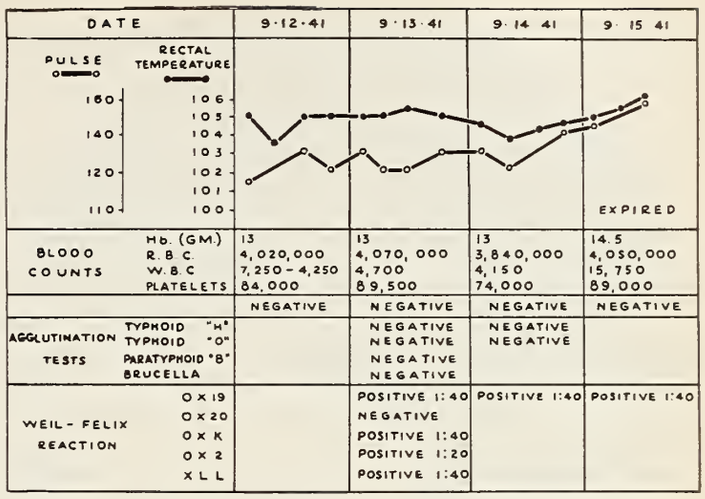

Fig. 3. *Case 2.* P. S., aged thirty-three.

purulent exudate; there were no areas of pneumonia. The liver weighed 2400 gm. and beneath the capsule there were multiple 1 to 15 mm. bluish dots. The parenchyma of the spleen was soft, dark purplish in color and it weighed 710 gm. The kidneys were swollen, soft and intensely congested with numerous submucosal pin-point hemorrhages. Likewise throughout the gastrointestinal tract, in the leptomeninges and in the brain there were petechial hemorrhages.

Tissue sections from this second case were sent to the National Institute of Health and examined by Dr. T. L. Perrin. He reported that the lesions found were not inconsistent with the diagnosis of Rocky Mountain spotted fever, but he added that they were not characteristic. He observed no rickettsiae in the tissue sections which he examined.

In specimens removed by sternal aspiration rickettsial bodies were found in large phagocytic cells, also in sections of the liver and the lung removed at autopsy by Dr. S. E. Gould (Fig. 4).

Discussion

The presence of the following major clinical manifestations of Rocky Mountain spotted fever, namely, sudden onset, generalized macular and purpuric rash, sustained high fever, mental disturbances and profound prostration, together with the finding of characteristic intracellular organisms in the tissues at autopsy would seem to place the diagnosis of Rickettsial Disease of Rocky Mountain spotted fever type on reasonably safe grounds.

During the same summer that these two cases occurred in Michigan, seven cases of Rocky Mountain spotted fever were reported in the neighboring state of Indiana. The onset of one of these cases was in June; two cases occurred in July and three in August. Three of these seven cases died.

The suggestion that the first of our cases was due to one of the rickettsial diseases was made by a member of the staff who had seen many cases

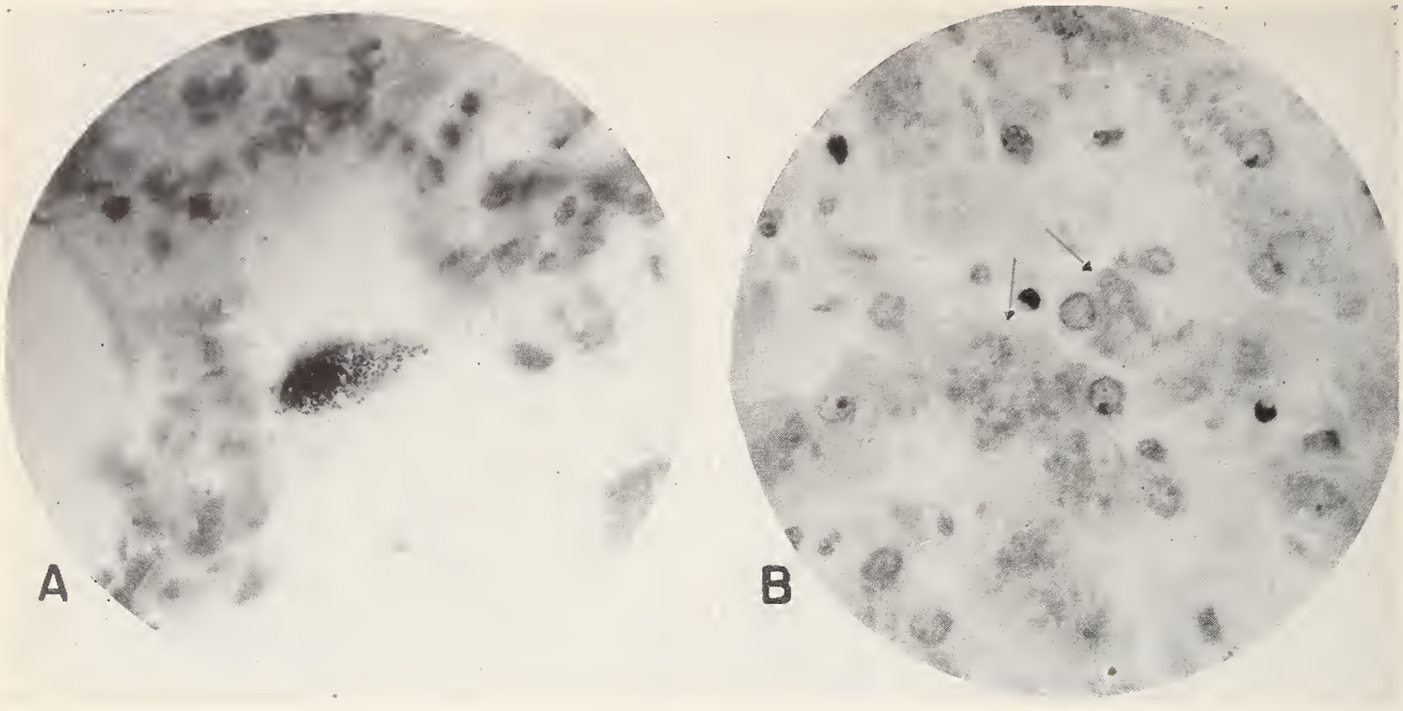

Fig. 4. Organisms in tissues removed at autopsy from Case 2. (A) Intracellular location in a section from the lung (x750). (B) Liver (x750) showing the organisms in the hepatic cells.

of typhus fever in Central Europe during and after World War I. Unfortunately, however, this patient expired before an absolute diagnosis was established by agglutination and cultural studies. Therefore, when this patient's husband was admitted one day after her death acutely ill and with similar symptoms, efforts were immediately made to establish the diagnosis by agglutination tests and/or the isolation of the virus. Specimens of blood were taken on the day of admission, which was the tenth day of the illness, and sent to the Rocky Mountain Laboratories of the U. S. Public Health Department in Hamilton, Montana. Additional blood samples taken on the twelfth and thirteenth days of the disease were submitted to the Michigan Department of Health Laboratories. The Weil-Felix agglutination reaction, using antigens of various B. proteus strains, was reported from both of these laboratories and from our own laboratory as being negative. Agglutination reactions using antigens of bacterium tularense, brucella abortus, American Q fever and B. typhosus were also reported as being negative.

The fact the agglutination tests were negative in this case does not disprove the diagnosis of Rocky Mountain spotted fever because the agglutination titer may not be significantly elevated until the fifteenth to the twentieth day of the illness.

Further efforts were made to confirm the diagnosis of Rocky Mountain spotted fever by guinea pig inoculation and cross immunity tests. Blood from the second patient was taken during life and at autopsy and injected intraperitoneally into guinea pigs. In this phase of our studies we were also assisted by the Rocky Mountain Laboratories. Twenty-two guinea pigs which had been inoculated in our hospital laboratory were shown to have Salmonella infection on arrival at the U. S. Public Health Laboratory. Cross immunity tests on these animals, according to Dr. R. R. Parker, were absolutely valueless. We were, therefore, unsuccessful in all attempts to isolate the infectious agent.

It was of interest to learn if possible how this man and his wife were infected. The incubation period for Rocky Mountain spotted fever is now generally agreed to be from two to fourteen days. It is therefore improbable that either of these patients was infected at the time they were in the western states where the disease is endemic. It seemed to us probable that one of the dogs harbored the vector responsible for the disease and that the human infection did not occur until shortly before or soon after they arrived in Michigan. This possibility was investigated, but no ticks or fleas were found on either dog or in the trailer after a careful search.

Summary

Two cases having the clinical features of a rickettsial disease occurring in Michigan are reported. These patients were itinerate night club

(Continued on Page 493)

Uterogram in Sterility

By R. C. Hildreth, M.D., and
C. P. Chrest, M.D.
Kalamazoo, Michigan

THE UTEROGRAM is another x-ray examination that is increasing in popularity in certain radiographic departments and medical centers. The 309 patients who have undergone this examination as an office procedure since 1937 have been referred primarily for aid in the study of a sterility problem. Review of this series of cases permits one to state that the procedure is relatively simple, safe, and practical.

This series is composed of patients referred by local physicians, principally general practitioners. The lack of significant complications in the group suggests that the study should be used early in the detailed search of all possible causes of female sterility. Other important pelvic pathologic conditions throw additional emphasis on the value of the uterogram. This, of course, is in accordance with articles in the literature following the introduction of hysterosalpingography in the early twenties.

By 1930, Witwer[3] and his associates had outlined the technical procedure and described the normal and pathological uterogram so well that little important information has been added since. Unfortunately this important aid to diagnosis has never received as much attention as it deserves. Several authors have reported series of cases running into the thousands, dealing principally with gynecological problems in general and female sterility incidentally. We choose to limit our present discussion to pertinent factors concerning the use of the uterogram in the investigation of female sterility. Fluoroscopic control of the procedure is the only important technical change in the examination in the past twenty years.

The Rubin test, as performed with carbon dioxide in many physicians' offices, has limitations diagnostically and therapeutically. Approximately 20 per cent of the women referred to us for uterography have experienced one or more Rubin tests. Most of these patients report to us that the iodized oil uterogram is less painful and less disturbing physically than the Rubin test. Furthermore, one can expostulate on the advantages of a liquid or hydraulic type of pressure over the use of a gas medium in the dilatation of Fallopian tubes closed by kinks or fine adhesions. We choose to look upon the uterogram as paramount in the detailed search of all possible causes of female sterility and as an important supplement to the Rubin test in many cases. The point to be emphasized is that when a Rubin test fails to relieve sterility, then the use of uterogram seems indicated within a six months period of time.

From the Radiologic Offices of Drs. Jackson, Hildreth, Volderauer, Pearson, and Chrest.

TABLE I. ANALYSIS OF UTEROGRAMS

	No. Normal Cases	Abnormal Cases		
		No.	T.D. less than 33 mm.	T.D. more than 45 mm.
1937	6	3		
1938	3	6		
1939	7	6		
1940	2	9		
1941	5	11		
1942	13	19		
1943	5	7	1	1
1944	9	7	1	0
1945	13	17	2	3
1946	29	17	2	3
1947	30	21	2	4
1948	34	30	3	4
	152	157	(11)	(15)

157 of the 309 cases represents 51% as abnormal.
Of the last 100 cases, 11 and 15 patients, respectively, had the internal bitubal uterine transverse diameter below or above average for a film-tube distance of 40 inches.

As indicated in Table I, 51 per cent of our 309 cases were reported as abnormal. These abnormalities were considered by the radiologist as definite enough to interfere with the patient's ability to become pregnant. This high percentage of abnormal findings is particularly significant of the value of the roentgenographic iodized oil method in the investigation of female sterility. Cervical erosions and severe stenosis of the cervical canal represent two common causes of sterility which are not discussed in this report. Also the effect on sterility of malpositions of the uterus is not gone into, although a quick perusal of patients who have readily become pregnant following a uterogram would seem to indicate that uterus position is highly overrated by physicians as a sterility factor.

Causes of Sterility

From the viewpoint of the radiologist the causes of female sterility, as outlined on the uterogram, can be divided into three major groups:

1. Chronic endocervicitis (Fig. 1). This is the most common finding reported in the abnormal uterogram group. This cervix often appears normal externally though the mucus in the cervical os may be more tenacious and cloudy than usual. On films made following

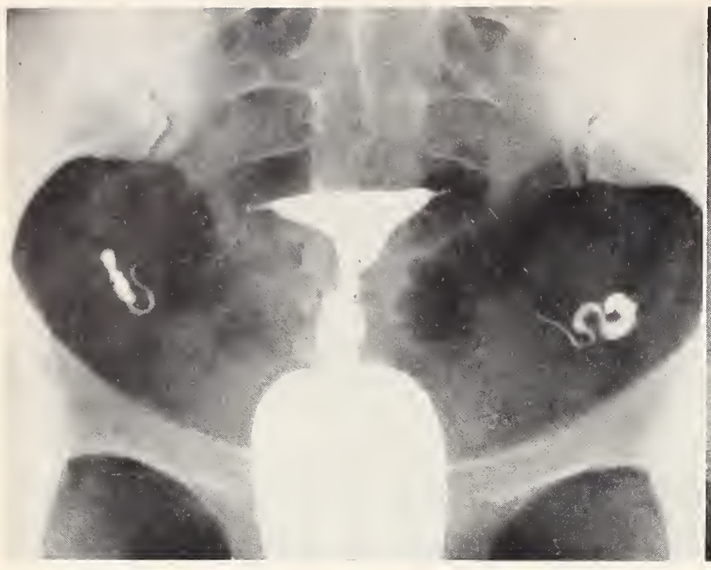

Fig. 1. Chronic endocervicitis.

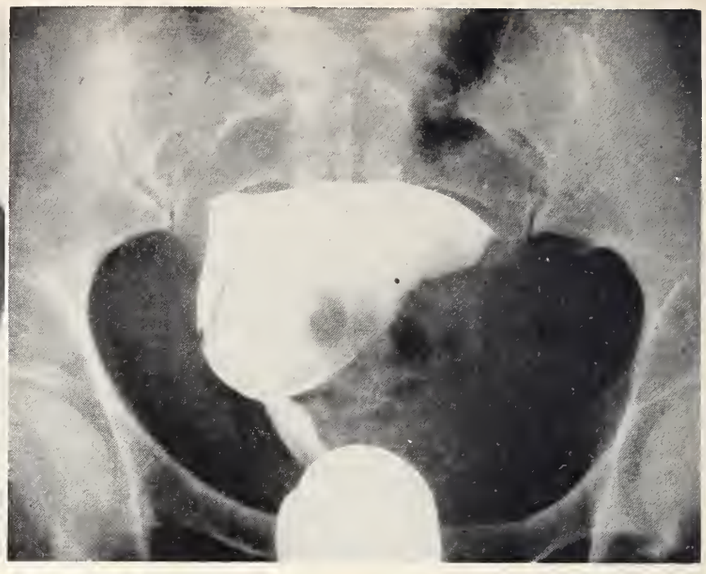

Fig. 2. Subserous fibroid.

injection of the opaque media, one sees deep pockets extending transversely from a dilated and slightly elongated cervical canal giving it a serrated appearance. Many of these crevices will retain opaque oil twenty-four hours later and represent infected and dilated glands of the endocervix. Gynecological correction will often permit successful conception providing the patient is otherwise able.

2. Occlusion of both tubes is the next largest abnormal group. This diagnosis is always based on the stereoscopic twenty-four-hour check-up film and not on the initial fluoroscopic or film impression, since functional tubal spasm might otherwise be confusing. Lack of characteristic peritoneal spread of the opaque oil is pathognomonic provided there have been no errors in technique. Two-thirds of the occluded tubes in this series have the point of occlusion at the fimbriated end, and with the usual hydrosalpinx formation. In the other one-third of obstruction cases, the block is either at the cornu or in the mid-tube area. Those cases with occlusion in the mid-tube area sometimes show a penetration of the media into the tube wall, giving a sun-burst appearance, which is best observed using a magnifying glass since it is minute. This represents the dispersion of the iodized oil into an infected tube, an analogous situation to the endocervicitis described above. Frequently endocervicitis and salpingitis of this type will be found to occur simultaneously. The chronic salpingitis with hydrosalpinx will present a characteristic appearance of sacculated dilatation, with the accumulation of opaque media showing little or no change in appearance at twenty-four hours or even at later intervals.

3. Anomalies of development, tumors and miscellaneous factors comprise a third large group in which the roentgenologic explanation of sterility is plain. Figure 2 shows a large subserous uterine fibroid which enlarges the uterine cavity and which mechanically would interfere with conception. The film appearance here is somewhat similar to that described for early pregnancy, a condition which we did not encounter in our series of cases. In the literature, numerous reports of intrauterine pregnancies outlined by iodized oil are found, the examination usually having been performed without knowledge of the pregnancy. In the majority of cases the procedure did not interrupt or interfere with the progress of pregnancy. In cases where therapeutic abortion was indicated, this procedure was usually unsuccessful as the chosen method of producing the abortion. Hysterosalpingography is of questionable value in the diagnosis of ectopic pregnancy and suspicion of this condition should probably be the only indication for its use when pregnancy is present. Figure 3 shows an infantile type of uterus. Three cases in our series had uteri similar to that illustrated and yet conceived later. A fourth case had incomplete fusion of the epiphyses for the iliac crests at age thirty-four, a delay in osseous development associated with hypogonadism. This type of patient is less likely to conceive. Using a 40-inch target film distance, we find the majority of uteri have a transverse diameter between the internal cornu ranging from 33 to 45 mm. A diameter of less than 33 mm. is one criterion in the diagnosis of the infantile uterus, although the contour is also indicative. Above 45 mm. in diameter, the uterus must be considered hyperplastic, and in our experience conception is less apt to occur than in the infantile uterus. About 10 per cent of the cases examined since 1943 were classified on the uterogram as infantile in type and 15 per cent were of the hyperplastic class.

This is the briefest outline of the conditions most often encountered in our experience. The literature is replete with descriptions of many other abnormalities encountered and which are not mentioned above: adenomyosis of the uterus, ovarian tumors distinguished from retroperitoneal or uterine tumors, menstrual fistula, unusual peristaltic or anti-peristaltic activity of the tubes, tuberculosis of the endometrium or tubes, retained secundines and hydatidiform mole, unsuspected malpositions in obese or otherwise difficult-to-ex-

amine patients. Adequate fluoroscopic and radiographic facilities are essential to the performance of uterography. Careful correlation of clinical findings is necessary if the radiologist is to make the best use of information derived from this valuable aid to gynecologic diagnosis.

Procedure

A radiologist, an x-ray technician and a nurse can perform the examination in about fifteen minutes in the average case. The assistance of the referring physician or another radiologist is desirable but rarely necessary. Dark adaptation for a minimum of fifteen minutes is essential, and the preliminaries to fluoroscopy can be performed in a darkened room with the aid of a dimmed red light. No prior medication is given. The gowned patient without shoes assumes the Sims position at the end of a standard x-ray table. Sterile technique without perineal preparation permits the placement of a bivalve vaginal speculum and the sponging of mucus from the cervical face and os. The cervix is grasped with two single-toothed tenacula. A sterile rubber coned metal cannula is next inserted into the cervical canal and the rubber cone is pressed snug against the cervical os while using counter-traction of the tenacula. On connecting the syringe, containing the warmed iodized oil, injection is now begun with gentle pressure and under fluoroscopic control. Without preliminary medication, we have found the patient's complaint of distress to be the best index of syringe pressure. Manometers are not used or considered necessary with fluoroscopic control of the procedure. Six to 8 c.c. is usually a sufficient amount and is made to fill one or both tubes to the fimbriated ends, but no attempt is made to force a spill. Injection is stopped when tubes are filled or spill noted and stereoscopic x-ray films made immediately. If the tubes are filled they will invariably spill oil into the peritoneal cavity later on, as shown by stereoscopic twenty-four-hour films, providing at least one tube is patent. Stereoscopy is often invaluable in deciding whether the opaque oil actually lies in the peritoneal cavity or in the tubes at this time. The uterus usually contracts and empties its cavity within five minutes after the procedure but we prefer stereoscopic films at the twenty-four-hour interval to determine patency of the tubes and exclude confusion from tubal spasm.

Fig. 3. Infantile uterus.

Therapeutic Effect

In addition to the value of this procedure in the sterility investigation, there is the dividend of its frequent therapeutic effect. One does not need to have an extensive experience in this field before learning from the referring physician or the patient herself that pregnancy occurred soon after the uterogram procedure, when failure to conceive was the patient's complaint for a justifiably long period of time. Many referring physicians have come to regard this therapeutic effect as the prime object of the procedure. Opening of previously occluded tubes by mechanical or hydraulic force is the primary action and is well documented in the literature. Although the iodine in the oil is present in a stable form, it cannot be disproved that enzymatic action within the body may release free iodine in minute quantities to permit some chemical effect on infected cavities, such as a hydrosalpinx where the contrast media will remain trapped for long periods. The breaking up of fine tube adhesions, the straightening of tube kinks and propulsion of inflammatory debris is often accomplished with minor effort at injection. These small but important tubal obstructions are not immediately recognized and the twenty-four-hour films show the typical peritoneal spill of a patent tube. Many case reports in the literature describe bilateral tubal occlusions which have become patent after one or more diagnostic injections. Heuser[1] in 1927 had placed the percentage of sterile women submitting to the examination who subsequently became pregnant as 30 per cent, and this figure is in line with our own experience and the reports of recent years.

The prognosis for pregnancy must be dealt with cautiously, and the radiologist should not be dogmatic in his statements in regard to the impossibility of conception lest the surprised parents use him as a namesake. Bilateral tubal occlusion means occlusion only at the time of examination, and tube behavior months or years later cannot be accurately foretold. One might be on somewhat safer ground in diagnosing a permanent sterility if a whole year follows a second or third abnormal uterogram. We unhesitatingly recommend repetition of the examination at six month intervals for several years in all cases of bilateral tubal occlusion where pregnancy is urgently desired. Some of these women will become pregnant or show a return to patency under this regime while others, after repeated tests, will show no change. This latter group might be considered as candidates for plastic repair of the tubes. Although we do not have any firsthand experience with such patients in the postoperative and convalescent period, it has been recommended and seems quite logical that continued patency might be insured by early repetition of the injection as well as being a check on operative results.

Untoward complications of this procedure are as rare in our experience as in the American and foreign literature. In three cases (1 per cent) of the 309 in our series, reactivation of a chronic salpingitis was thought to be a possibility. Two other cases having known tuberculous apical pulmonary scars and occluded tubes which were possibly tuberculous had no flare-up. In three cases before 1937 we had experience with contrast media entering the utero-ovarian venous channels directly from the cavity of the uterus and this was observed fluoroscopically, injection being immediately discontinued. None of these patients presented clinical symptoms or findings. To obviate the incidence of this aurora borealis-like phenomenon, the procedure is always done in the midinterval of the menstrual period when vascular sinuses of the endometrium are not apt to be easily permeable. In the hands of those familiar with the procedure, hysterosalpingography is a safe procedure, and the accumulation of a series of over 4800 unselected cases by Robins and Shapira[2] without any fatality speaks for itself. We emphasize that adequate fluoroscopy is a factor in preventing complications.

Summary

The uterogram is a valuable aid in the diagnosis of gynecological disorders as well as in the investigation of female sterility. The more common causes of sterility as revealed by this procedure are unrecognized chronic endocervicitis, tubal occlusion, and a mixture of pathologic conditions, developmental and acquired. The examination, as we have performed it, is an office procedure by the radiologist, done under sterile technique and without preliminary medication. Adequate fluoroscopic control of the procedure is essential. The therapeutic results of hysterosalpingography are as important as the diagnostic aspects in the handling of the female sterility problem. A single uterogram diagnosis of bilateral tubal occlusion, or hydrosalpinx, infantile or hyperplastic uterus should not be too discouraging to the referring physician because a fair percentage of these patients do become pregnant following the procedure. Repetition of the procedure is valuable in treatment as well as in prognosis. The use of contrast media and roentgenography permits localization of the site of abnormality as well as description of the abnormality itself and is superior to the Rubin CO_2 tubal insufflation method, both from a diagnostic and therapeutic standpoint.

Conclusion

1. The iodized oil uterogram performed under adequate fluoroscopic control has been found to be a safe procedure.

2. A high percentage of pathologic conditions found in 309 cases indicates the importance of an early use of the uterogram in a detailed diagnostic investigation of female sterility.

3. The therapeutic importance of the uterogram is commensurate to its diagnostic value.

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MSMS

CHALLENGE TO SOCIALISM

Dr. Marjorie Shearon has edited and published a four-page periodical "American Medicine and the Political Scene" for over four years. She has now changed the name to "Challenge to Socialism" because as she says the political scene in Washington is shaping up into a clearcut program of socialism. The political planners do not like the term "Socialism," and deny its application to them, but that is the picture.

Pregnancy and Labor Experiences of Elderly Primigravidas

By Edward G. Waters, M.D., F.A.C.S., and Henry P. Wager, B.S., M.D.
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THE pregnancy and parturitional experiences and problems of elderly primiparas have been of great interest to us, first because we have seen so many during recent years, and also because we questioned the validity of many of the old expressed and seldom documented opinions. We are especially concerned with the existence and influence of any genital tract obsolescence, frequency and manner of operative deliveries, character of the labors, incidence of complications, and related facts.

To establish a basis for such opinions as might be derived, we studied and catalogued the experiences and results of pregnancy and labor of all elderly primiparas delivered during a ten-year period at the Margaret Hague Maternity Hospital. For better interpretation we contrasted these data with those from a comparable group of primiparas in the first decade of childbearing. The attitudes and opinions we have expressed as a result of this study are worthy of repetition to this meeting, for there are few practicing physicians who will not at some time use the answers.

The childbearing life of women may be divided into three spans or trimesters. The first decade of fifteen to twenty-five years comprises definitely young primiparas. The intermediate group is twenty-five to thirty-five years, and in the elderly group all are over thirty-five. Since the majority of elderly primiparas would naturally fall into the earlier years of the third trimester, as shown by our experience, a statistical aberration might arise by a comparison with the intermediate group, or under some conditions, the clinic material as a whole. Therefore, the experiences of all of the elderly group are tabulated for comparison with an equal number of young primiparas selected at random and taking proportionate numbers of cases for each year of the ten-year period. Where sampling would be inadequate, as with cesarean sections, the comparisons are with the general clinic incidence.

It is difficult to see the interpretive value of statistical data dealing *solely* with elderly primiparas. Even if compared to clinic material as a whole, a considerable portion of the intermediate group might contain influencing factors not too dissimilar from a group of elderly patients. With comparative analysis, however, it is believed that a reasonably accurate picture of the actual labor and parturition experiences is obtained and may be contrasted with probable experiences of their missed early childbearing decade. In other words, what added risks have these patients assumed by having their pregnancies twenty years later than the optimum age group?

The answer is sought in this review of 56,396 deliveries in a ten-year period at the Margaret Hague Maternity Hospital. There were 649 primiparas over thirty-five years of age, of whom 639 were white, eight black and two yellow. In the pro-rated random selected group of 649 primiparas under twenty-five years used for comparison, there were 630 white, nineteen black.

The various tables are in general self explanatory, and subsequent remarks will accentuate only their more significant and pertinent components.

Effect of Age Disorders and Complications of Pregnancy

Since the manner of parturition is frequently conditioned or dictated by disorders or complications of the pregnancy itself, irrespective of mechanical factors, it may be well first to consider the ante- and intrapartum happenings. Pernicious vomiting of pregnancy has been considered a common complication in elderly primiparas, but this is not verified by our experience. There were only three severe cases in the elderly group, compared to six in the young group. Consideration of the toxemias of pregnancy, however, shows pre-eclampsia and eclampsia occurring with twice the frequency, and nephritis also is much more commonly encountered. Hypertension is seen about twice as often. This is in accord with previously published data from this clinic (Chesley), where toxemia incidence is higher in all groups of patients with pre-existing renal disease and hypertension. The effect of aging upon the vascular system thereby acquires considerable significance and is of dis-

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tinct importance in prognosis. As might be expected, the higher toxemia frequency materially influences the operative rate. Since this data shows pregnancy toxemia more than twice as frequent as in the young, it indicates the need in the elderly for constant and careful supervision during the last third of pregnancy.

The fetus itself is subjected to the hazard of abortion, which is three times as frequent, and fetal death before labor (2.16 per cent), but there is nothing to indicate any marked increase in abnormal fetation, in contrast to common opinion. Total fetal salvage is approximately the same as with young primiparas, even though premature labor is a much more frequent occurrence.

The hemorrhagic diseases of the last trimester of pregnancy materially influence the manner of delivery. It is of more than ordinary importance, therefore, that we know, within reason, the probability for these complications occurring in late pregnancy. We find abruption of the placenta and placenta previa frequent in the elderly, with respect to young primiparas and clinic incidence. Antepartum hemorrhage of undetermined cause, meaning vaginal bleeding of undetermined origin, probably includes certain cases of partial abruption or of low placental implantation. In the group of twenty-three elderly primiparas with parturition complicated by antepartum hemorrhage, the operative incidence obviously must be high. These twenty-three cases contrast with five in the young group who hemorrhaged before parturition. Reasons may be found in the data on pregnancy toxemia, nephritis and hypertension, which directly influence the occurrence of abruption and also the increase with advancing years of the myopathies which make abnormal placentation more likely. Hemorrhagic complications are encountered twice as often as in the general clinic, and four times that in the young patient. It is well, however, to remember that these absolute ratios still leave such complications as relatively infrequent occurrences (2.9 per cent) among elderly parturients.

Effect of Age upon the Mechanics of Parturition

Pelvic types unfavorable for normal vaginal delivery occur four times as often in the elderly group. This fact does not lend itself to easy interpretation, but it has been noted repeatedly in other analyses. The relationship of relative sterility and late pregnancy is present in some cases but not so sufficiently constant as to account for the wide differences noted. The factors of prolonged sterility and infertility with genital hypoplasia are of no more significance than in younger patients, and when pregnancy occurs they present essentially the same problems relative to labor and its manner of termination, irrespective of age. Less favorable are malpresentations, noted twice as often in the elderly group, a finding of significance when considering the termination of labor. There was no absolute prolongation of labor, and the more frequent rupture of membranes before onset of labor did not influence labor duration markedly. There is nothing in the data obtained nor in the author's experience to indicate that late childbearing is accompanied by dystocia dependent upon rigidity of the perineal tissues, the pelvic fascia, or inflexibility of the pelvic ligaments. Long labors are more noted by the attendant when they occur, but they are not more frequent. There is no increase in postpartum uterine atony, blood loss or hemorrhage, in spite of the increased number of myopathic uteri. Complications dependent upon the latter would seem to require some other factor, as previously revealed, in producing conditions conducive to hemorrhage.

There is no significant change in weight or measurements of the newborn. The expected increase in ovular defects is represented in the increased number of abortions, and the aging uterus produces an increase in antepartum intra-uterine stillbirths. But fetal salvage of babies born at term, as previously disclosed, was almost the same as with the young group. The increase in malpresentations augmented the operative incidence to 33⅓ per cent as against 20 per cent. But again, the figures on fetal injury and survival fail to show any increased danger to the fetus through judicious use of mechanical means to expedite or facilitate delivery in these patients. Our direct observation of a large number of elderly parturients fails to reveal any notable increase in mental or emotional effects, or interference with normal recuperation or puerperal involutional changes.

Complicating Systemic Disease and Disability

Heart disease is one of the most serious of all medical complications. Its incidence in the elderly group will be observed to be almost identical with that of the young primiparas. This is not as paradoxical as it might seem. Since the life span of cardiac patients is in large measure limited to the earlier years, it follows that many would not

survive to become pregnant for the first time beyond thirty-five. It is also probable that many of those surviving would not marry, or if they did, would not conceive or carry. Therefore, these figures, which seem to indicate that heart disease as a complication of pregnancy is not seen more often in the elderly than in the young primipara, can be taken as representative of true occurrence. Certainly a group as large as this study entails should show such a difference if it were existent or significant. The same reasoning applies to diabetes, although a better survival rate is progressively being obtained and we might find more patients reaching the late childbearing years. However, the known failure of adequate diet and insulin therapy to prevent vascular degeneration in the aging diabetic probably accounts for the failure of many of these patients either to become pregnant or to carry to term. The high toxemia incidence and vascular sclerosis make pregnancy infrequent and highly dangerous beyond thirty-five in any diabetic.

Neoplasms involving the generative tract are far more common as age progresses. This shows up especially in the case of fibromyomata of the uterus, a condition almost absent from the young group, but extremely common in the last trimester of the childbearing years. What effect it has upon the mechanism of labor and manner of delivery will require further comment.

Manner of Delivery

Forceps applications were made twice as often in the elderly as in the young patient. Most marked variations are noted in forceps for outlet dystocia and pelvic arrest, four times more common in the elderly patient. Even more striking is the statistical data on cesarean section, done five times as often. Here comparison was not made with the random-selected group of young primiparas because this would not be suitable, inasmuch as the general cesarean incidence was under 3 per cent. The general clinic incidence was used because while the 649 young primiparas selected from the larger group would be included with the similar number of elderly primiparas, in a group of nearly 60,000 deliveries, this would not be sufficient to produce a significant statistical aberration.

Socio-Economic Factors

There are a number of influencing conditions of pregnancy and parturition in this group which do not easily lend themselves to tabulation, but which recur constantly in any experience and at least must be mentioned. The attitudes developed toward pregnancy vary widely but in general are in accord with the accepted ones of motherhood. The older patient, in the absence of complications, has no more nor greater ills in early pregnancy, to induce disquiet toward her status. The most disturbing states tend to develop after discharge to her home. If she has married late, the dislocation is less. If childbearing came late in married life, then the interference with long-established routine is notable, and markedly augmented should infant care become complicated. The older patient is psychologically less well adapted to handle the minor ills and care for the baby, and the degree of apprehension increases as the ovulating years become fewer. The natural increase in physical impairments and illnesses beyond thirty-five and the 10 per cent fewer babies living and viable at term are inductive to increased nervous tension and lessening of the normal resiliency to "trouble." Worry is somewhat provoked by the need for extra supervision during pregnancy, especially due to the increase in toxemia incidence and hemorrhagic complications.

In spite of the above, however, the vast majority of these elderly primiparas under good counsel approach maternity with a magnified keenness of appreciation and a thoroughly stabilized and rational attitude.

Discussion

The age at which one becomes an elderly primipara necessarily must be arbitrary. With respect to conception and childbearing, a patient is not young one day and old the next and thereby in a group requiring or receiving attention which may radically differ. The years of childbearing are rather constant, between fifteen and forty-five. Biologically the early years would naturally constitute those when primiparity would have the highest incidence. We would expect economic and social factors to produce a statistical shift away from the very early years and show a gradual rise in primiparous incidence to a maximum during the third decade of life. Actually, as we have seen, this occurs. At the other end of the span, the age factor should not materially influence birth incidence until the last third of the childbearing years. While the aging process varies widely in its rate of invasion in various individuals, it is appreciated that at thirty-five its effects are generally patent,

though seldom extensive. Thirty-five would seem to be the choice optional year for indicating when aging becomes directly of concern in pregnancy management and prognosis. It marks the half-time of life as well as the last third of menstrual life and the closing years of fruitful marriage or of pregnancy possibilities in the recently married. It is highly desirable from a standpoint of critical analysis to have a commonly designated and accepted age-group for late primiparity, and in this analysis it is established at thirty-five years and older.

Consideration is also given the effect of age upon pregnancy, of pregnancy upon the aging individual, and the effects of deferring primiparity into the last ten years of childbearing life. The patient and her doctor are stirred by the potential of increased trouble applicable to delayed first pregnancy.

The effect of age upon pregnancy is noted in the increase in systemic disease concurrent with aging, notably vascular disease and its complements, the toxemias of pregnancy. The well-recognized increase of pregnancy and fibroid coexistence in the older group is again seen, although there is a notable lack of interference with late pregnancy by fibroids. The high incidence of abortion may be explained by increased myopathy, the altering hormonal balance and peripheral vascular changes. The greatest threats in any pregnancy are hemorrhage, infection, toxemias, heart disease. Bleeding leading to abortion, and that associated with placenta previa and abruption is met with increasing frequency as aging progresses. The toxemias are twice as numerous in the important categories. The rate for heart disease is fairly constant for all groups and understandably so. For the per-year death loss to thirty-five reduces a high potential cardiac loss, and severe cardiacs not marrying or not conceiving before thirty-five are less likely to become or stay pregnant. Morbidity from intra- and postpartum sepsis is no higher, excepting for a sharp rise in puerperal endometritis. This may be associated largely with the very much higher incidence of operative termination of labor (q.v.).

The membranes rupture more often before the onset of labor, but this seems to influence the labor outcome mainly in those coming to cesarean section, and the extraperitoneal route is then chosen. Premature delivery is not common and induction of labor infrequently needed.

Pelves of restricted capacity and abnormal presentations involve the principals often. These notably influence the operative incidence. Excluding purely prophylactic use, low forceps were required four times and mid-forceps three times as often as in the general clinic. The cesarean incidence was five times the general clinic rate, with extraperitoneal section used in one-fourth of these.

There is no single reason for the high vaginal and abdominal operative incidence. Certainly it is not to be found in the hours in labor (no longer), the days hospitalized (no more), blood loss (no greater), the birth weight of the infant, or antepartum morbidity. The major contributing factors are the increase, in this series, in malpresentations, restricted pelvic capacity, high toxemia rate, placental abruption and previa. In outlet forceps, most of the applications were to shorten the second stage in the interest of the fetus and because of its high social value, since the duration of labor was not generally prolonged when delivery was effected. The repetitious inference that most elderly primiparas have rigid perineii was not borne out by experience, nor shown by the indications for employing forceps. There is nothing in this series nor in the writers' personal observations to show that there is any significant obstructive change in the character of the maternal soft parts while the patient is still within the childbearing years. The high number of mid-forceps deliveries was due in large measure to the transverse and posterior occipital presentations, resolved mostly with Kielland forceps.

The very high incidence of cesarean section requires some study. It is evident that the indications must be widely broadened in this elderly group to provide an incidence of over 16 per cent when the general clinic rate was about three per cent. The factors previously referred to operate largely in the causation of this high figure, but listed in more than half of the cesarean operations are correlated indications which are statistically diverse and intangible, and may be assembled under the heading, "high social value of the child." This, in a primipara over thirty-five, is a highly salutory and commendable inclusion which tips the scale to cesarean section when there are any factors in the pregnancy or imminent parturition which prejudice the likelihood for fetal survival. In our opinion it is the most potent of aggregate indications when more than one is given. It designates conservative salvage from what may be conceivably the only preg-

nancy in the elderly patient's experience. When cesarean section offers an excellent chance against a moderately good chance for fetal survival in this group, it is generally elected in our clinic.

It will be noted that there were 145 deaths (0.26 per cent) in the hospital during the ten-year period, and thirty-six or one-fourth of these were gravidas over thirty-five years of age. In nearly half of these, diseases coincident with or worsened by aging were factors as causes of death. This is certainly an indicant, if one were needed, that having babies after thirty-five is less safe than in the first thirty-years of childbearing. But only eight (5.5 per cent) were *elderly* primiparas, and of these only three followed cesarean section. While four might be considered as dependent directly or indirectly upon aging, these figures certainly do not establish elderly primiparity as a grave maternal life threat, whether the delivery is normal or operative. The risk is obviously greater, as might be expected, but the differential between old and young primiparas is certainly not remarkable.

Conclusions

The prognosis for the elderly patient in her first pregnancy is good if she has no cardiac, vascular or degenerative disease.

There is a definite increase in toxemia of pregnancy and hemorrhagic complications.

The incidence of operative deliveries is high, the cesarean rate reaching 16 per cent.

Early termination of pregnancy and fetal loss is more common in the older group. For patients reaching term, however, there is no increased risk for the baby in the last decade of childbearing.

The only more important hazards are those related to the inevitably greater population losses with progressive aging.

Elderly primiparity *per se* does not constitute a grave maternal life threat.

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INCOMES IN GREAT BRITAIN

According to a recent report in the press, only 250 persons in Great Britain have incomes of more than $14,000 per year after taxes are collected. Before World War II, 11,000 persons are reported to have had incomes exceeding $14,000 after tax deductions. A representative of the British government is said to have claimed that this reduction of incomes is an "outstanding socialist achievement." If this report is true, it is a sad commentary at a time when evidence of incentive is necessary. It would seem more appropriate to extol increases in income than to brag about decreases. It is no wonder that incentive and capital for investment are lacking.—*The Journal of the American Medical Association*, February 25, 1950.

Leukemia in Pregnancy

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PRACTICALLY EVERY blood dyscrasia has at some time been reported as a complication of pregnancy. The association of leukemia and pregnancy is so infrequent that only 107 such instances have been recorded in the literature to date.[1,2,3,4] It is the purpose of this paper to discuss such association and to report a pregnancy complicated by acute myelogenous leukemia. That pregnancy should so infrequently be associated with a disease which claims over 6,000 lives annually[9] is thought to be due to the frequent sterility of the leukemic female. This sterility is attributed to secondary amenorrhea and massive leukemic infiltration of the genital tract.

While it is true that the scarcity of cases precludes accurate statistical data as to the occurrence of the various types of leukemia in pregnancy, it would seem that the chronic form is slightly more common than the acute form. Chronic myelogenous leukemia is much more common than chronic lymphatic leukemia. In these cases of coexistent leukemia and pregnancy, acute leukemia has never preceded conception while chronic leukemia has frequently done so. The presence of the disease is most frequently recognized between the fifth and seventh months of the pregnancy.

The majority opinion, at present, is that the course of leukemia is not affected by pregnancy. This is debatable, however, since there have been reported instances of exacerbations of chronic leukemia either during pregnancy or shortly following parturition, and of unexplained fatal collapse in both acute and chronic leukemias after delivery.[8] There has also been reported an instance of acute leukemia, discovered in the seventh month of pregnancy, which underwent a spontaneous twenty-one-month remission.[2] This divergence of opinion undoubtedly arises from the lack of any extensive individual experience with coexistent leukemia and pregnancy.

Leukemia has a definite effect upon the course of pregnancy in that it predisposes to premature delivery and high fetal mortality. Prematurity of labor is more frequent in acute leukemia than it is in chronic leukemia.[6]

In all cases of non-irradiated maternal leukemia so far reported, the offspring have been normal.[5] One exception[1] was an instance of a congenital malformation, probably unrelated to the leukemia. All evidence obtained from animal experiments,[4] and clinical and necropsy experience, indicates that the placenta is a barrier to the transmission of leukemia.

No instance, either of leukemia in the child or of leukemic cells in the fetal circulation, has been reported in any case of maternal leukemia. Conversely. in none of the small number of congenital leukemias so far reported has there been an instance of leukemia in the mother.[3,11,13]

If certain precautions are observed, the usual treatment is that of any leukemia. Irradiation, whole blood transfusions, and penicillin are the most widely available therapeutic agents. Massive doses of vitamins B and C have been empirically recommended. Fowler's solution and irradiated phosphorus have been used, especially in the acute leukemias. X-ray is usually not indicated in acute leukemia unless severe bone or nerve pain is to be relieved, since it so frequently does little more than produce irradiation sickness.[6]

Intensive irradiation therapy may be instituted with no danger to the baby if the pelvis is avoided and caution exercised in irradiating the spleen. The ill effects of pelvic irradiation on any fetus are well known. The only reported deaths from irradiation therapy were of one hydrocephalic and one normal sibling, due apparently to a thermal center disturbance following irradiation of their leukemic mother's spleen.[5]

All leukemic women should be advised against pregnancy. However, if pregnant, it is the general opinion that they should be carried as near to term as possible. It is felt that the shock of interruption of pregnancy is just as great as that of parturition. Abortion is not indicated in acute leukemia since it in no way delays the imminent death of the mother. It is not indicated in chronic leukemia since the course of the disease is usually unaffected by pregnancy, and if the mother does not abort prior to delivery, the baby has a good chance of surviving. Seventy-five per cent are living and healthy if carried to term.[5] As mentioned previously, these children are usually perfectly normal.

Whenever possible, these children should be delivered by the vaginal route. Although hemorrhagic diathesis is a part of the leukemic picture, unusual hemorrhage during the delivery of the baby or placenta is conspicuously uncommon in the cases reported.

If the fetus is viable, immediate cesarean section is indicated at any time the mother fails rapidly despite therapy. Successful antemortem cesarean section with delivery of a living baby has been reported more than once.[5,10] Postmortem sections are of no avail since fetal death usually precedes maternal death.[1,6] Although all reported antemortem sections were without hemorrhagic complications, had unusual bleeding been present, the situation would not have been altered in any way. The chance of delivering a living child would have justified any possible hastening of the inevitable maternal death.

Case Report

The patient, a twenty-eight-year-old gravida VIII, para VII, was admitted during the seventh month of pregnancy in a semi-stuporous condition. Her seven previous deliveries were without complications, except for one child who died shortly following birth from a congenital heart lesion.

Excepting childhood chorea and an appendectomy, the patient's entire previous health and the course of the pregnancy had apparently been uneventful until one week prior to admission. At this time she developed the first of numerous shaking chills with fever. Associated with this were polydypsia, polyuria, and repeated emesis. Two days prior to entry, epistaxis, bleeding from gingivae and lips, and hematemesis occurred. She had noticed that she bruised easily, but thought nothing of this since this tendency had also been present with her previous pregnancies. The increasing severity of her illness finally forced her to seek admission.

The family history was non-contributory except that one sister had diabetes.

Physical examination revealed the patient to be acutely ill, dehydrated, and semi-stuporous. The rectal temperature was 105.6 degrees. The respirations were rapid and the breath foul. Blood was crusted about the lips and nares, and the gingivae were ulcerated. Numerous areas of ecchymoses were present on the skin. There was no palpable lymphadenopathy. Breath sounds were absent in the base of the left lung posteriorly. There was no evident cardiac pathology. The blood pressure was 100/60. The pulse was 130 and regular. An appendectomy scar was present. The liver and spleen were not palpable although there was marked tenderness in the splenic area. The uterus was gravid and extended two centimeters above the umbilicus. The fetal heart tones were strong. All reflexes were physiological.

Laboratory studies were as follows: erythrocytes 2,790,000 per cu. mm., hemoglobin 46 per cent, color index 0.8, white blood cells 26,100 per cu. mm. with the differential count (expressed in per cent): myeloblasts 47, progranulocytes 38, metamyelocytes 3, lymphocytes 9,

neutrophiles 2, monocytes 1. Occasional nucleated red cells and "basket" cells were found. Platelets were 60,200 per cu. mm. The clotting time was five minutes. Prothrombin and bleeding times were not determined at the end of thirty minutes. Bone marrow studies revealed an almost complete maturation arrest at the myeloblast and promyelocyte level. Urinalysis revealed 4-plus albumin, slight trace of sugar, innumerable erythrocytes, a few white blood cells, and a few granular casts per high power field. Blood chemistry findings were: urea nitrogen 58 mg. per 100 c.c., urea 126 mg. per 100 c.c., glucose 162 mg. per 100 c.c., chlorides 513 mg. per 100 c.c. Carbon dioxide combining power was 34 volumes per 100 c.c.

Despite transfusions, penicillin, and other supportive therapy the patient's course was rapidly downhill, and she died nineteen hours following admission.

The fetal heart tones ceased four hours prior to the maternal death thus voiding preparations for a postmortem cesarean section.

Terminally, the patient developed Cheyne-Stokes respirations and pulmonary edema. Her entire urinary output while in the hospital was only 30 c.c.

Necropsy Report.—Necropsy examination revealed findings typical of leukemia including ecchymoses of skin, blood in nares and on ulcerated gingivae, dark, muddy, gray colored sternal marrow, superficial ulcerations of lower esophagus, petechiae of gastrointestinal mucosa, large soft purple spleen (850 grams), large liver (3600 grams) with petechial hemorrhages in the parenchyma, universal slight lymph node enlargement, petechial hemorrhages in kidneys with clotted blood in the calyces.

Other findings included heavy wet congested lungs, small red verrucous vegetations on mitral valve, and a gravid uterus with a normal appearing seven months' male fetus in L.O.T. position. Sections were taken through the placenta and umbilical cord. (Permission for postmortem examination of the fetus itself was, unfortunately, withheld).

Microscopic findings included severe hemorrhage into alveolar spaces of lungs, leukemic infiltrations of mitral valve, severe ulcerative hemorrhagic leukemic esophagitis, diffuse myeloblastic transformation with loss of lymphoid architecture of spleen, acute congestion with leukemic infiltration most marked in the portal areas of liver. Also areas of hemorrhagic necrosis were present in spleen and liver. Lymph nodes revealed diffuse myeloblastic transformation. Kidneys showed hemorrhage by diapedesis into tips of papillae and calyces and multiple areas of thrombosis in the tips of the papillae. There were patchy but solid leukemic streaks following vessels in the kidney with associated hemorrhagic diathesis and some actual necrosis. The bone marrow was crowded with immature cells of the granulocytic series, some of which were undergoing mitosis. The uterus was in a gravid state with placenta attached. No leukemic cells were found in the fetal vessels of the placenta nor in the sections of umbilical cord.

Summary

The case history and necropsy report of a patient in the seventh month of pregnancy with acute myelogenous leukemia is presented. It serves to emphasize the futility of waiting for a postmortem cesarean section, and again demonstrates the effectiveness of the placenta as a barrier to the passage of leukemic cells.

The opinion of the majority in recent reports is as follows:

The course of leukemia is unaffected by pregnancy.

The offspring of leukemic mothers are normal.

Pregnancy complicated by leukemia should be carried as near to term as possible, and then delivered in the usual manner whenever possible.

Immediate cesarean section is indicated at any time the mother fails rapidly despite therapy, if the fetus is viable.

The usual treatment of leukemia may be carried out despite the pregnancy if pelvic irradiation is avoided.

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"You cannot bring about prosperity by discouraging thrift. You cannot strengthen the weak by weakening the strong. You cannot help the wage earner by pulling down the wage payer. You cannot further the brotherhood of man by encouraging class hatred. You cannot help the poor by destroying the rich. You cannot establish sound security on borrowed money. You cannot keep out of trouble by spending more than you earn. You cannot build character and courage by taking away man's initiative and independence. You cannot help men permanently by doing for them what they could and should do for themselves."—*Abraham Lincoln.*

Corneal Transplantation

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THE TRANSPLANTATION of a human cornea from donor to host is not a new surgical procedure. Von Hippel in 1877 performed the operation, using a round graft, with no bevel or sutures. Although his efforts in this field were not very successful, he did open the door to the possibility of a corneal transplantation operation.

In 1906 the next forward step was taken by Zirm. He also used a round type graft cut by the Von Hippel trephine and introduced the use of two criss-cross sutures overlying the graft and attached to the conjunctiva at the limbus. He stressed six cardinal basic points necessary to a successful operation: (1) exclusive use of human cornea for the graft, preferably the cornea of a healthy young person, (2) use of Von Hippel type of trephine and instillation of eserine if the anterior chamber is present, (3) profound anesthesia during the operation, with strict asepsis, (4) protection of the graft between pieces of gauze moistened with sterile physiological salt solution kept warm by steam, (5) retention of graft in position by two sutures attached to the conjunctiva and forming a criss-cross over it, (6) strict selection of cases, stating that only central scars of the cornea are suitable for the performance of keratoplasty. Today all six points are still basic and in their essentials they have changed only slightly. It was not until 1911 that the operation was again taken up by Elsching, whose technique was similar in nature to that of Von Hippel. Although his results were not outstanding, he did give impetus to the operation.

The modern school of keratoplasty dates back approximately twenty-one years. It is from this school that most of the modern advances have come. The nucleus of this school are Filatov of Russia, Thomas of England, and Castroviejo and Paton of the United States. It has been largely through the laborious painstaking efforts of these four ophthalmologists that this operation has attained the high degree of success it has today.

Filatov was the first to use preserved corneal tissue for the grafts. He introduced several innovations, namely, the use of a hand trephine and prophylatic spatula inserted into the anterior chamber to be used as a protection for the lens and iris. Instead of sutures he advocates the use of egg membrane over the graft.

In 1930 Tudor Thomas of England published his results with corneal transplants. In his work he stressed the use of a long bevel of both donor and host. He cut the donor graft slightly smaller than the recipient bed in the cornea of the host and placed sutures directly over the graft and into the cornea of the host, close to the edge.

It was also about this time that Castroviejo of New York City introduced the square cut graft. He used a double-bladed adjustable knife with parallel blades to outline the graft, which he finished with a specially designed 4.0 mm. keratome and corneal scissors. In his early work he used a 45 degree bevel but later he cut the donor graft and host cornea exactly the same size. He introduced a single continuous overlying suture inserted 1.0 mm. from edge of the donor graft into the recipient cornea.

Townley Paton of New York City within the last ten years has championed the use of the round graft cut with his specially designed trephine hand driven and adjustable as to depth. In his technique he uses two figures of eight sutures, one black and one white, so that they can easily be differentiated, inserted into the recipient cornea 1.0 mm. from the edge of the graft.

No mention of corneal transplantation would be complete without the mention of the work of the Eye Bank for Sight Restoration of New York City. The Eye Bank functions as the prime mover obtaining the eyes, checking them carefully as to history and infection, and seeing that they reach their destination via Eastern Airlines and the Motor Division of the Red Cross. Both of the latter two organizations have given of their time and help, faithfully seeing that the eyes arrive in time to be useful.

In the beginning of the modern era most of the transplants were performed by a few ophthalmologists who were particularly interested in the subject. However, today the operation can be performed almost anywhere in the United States by ophthalmologists trained in the technique.

Types of Corneal Transplants

There are four types that will be discussed (Fig. 1).

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Total Corneal Transplant.—This is the type in which the entire cornea is removed and is replaced with a complete new cornea. The operation has proven to be completely unsuccessful, so it will not be discussed in this paper.

Total Lamellar Corneal Transplant.—This type of operation requires the removal of the entire upper half of the corneal thickness (approximately 0.5 mm.) and replacing it with a similar thickness of cornea from a donor source. A large measure of success with this type has been reported by the European school.

Partial Lamellar Transplant.—This type is similar to the one just mentioned, except that the operation does not include the entire diameter of the cornea. Usually it is limited to 5.0, 6.0, or 7.0 mm. in size and 0.5 mm. depth. The European school reported good success with this type also. These results have not been borne out in this country. Further work must be done on this type before it can be recommended as an established procedure, but it does however hold good promise.

Partial Penetrating Corneal Transplant.—This type refers to a transference of a corneal disc (4.5, 5.0, 5.5, 6.0, 6.5 or 7.0 mm.) from the donor to that of the host. This is the type usually referred to when a corneal transplant is done and the one that this paper deals with. It is the most universal type and the one that attains the largest degree of success.

The first question that arises when a patient is presented as a possible candidate for a transplant is, "Is the case suitable or is it beyond the present realm of our knowledge and technique?" The primary consideration is whether the patient's vision be improved and how much vision can be expected in each case. There is no exact determining line which renders one case ideal and the next case totally unsuitable. Roughly speaking, it can be stated that when the patient no longer has useful vision either for the performance of his job or in relation to his environment, a corneal transplant can be considered. What then is useful vision? It is vision below 20/200 or slightly less, especially if the person is no longer engaged in active work and is able to support himself. In the very young, transplants should not be done because of their inability to co-operate. The initial operation could be performed under general anesthesia, but there is more to the success of a corneal transplantation than the initial operation. The patient must be still, flat on his back for several days, and the removal of the sutures, as will be seen later, is

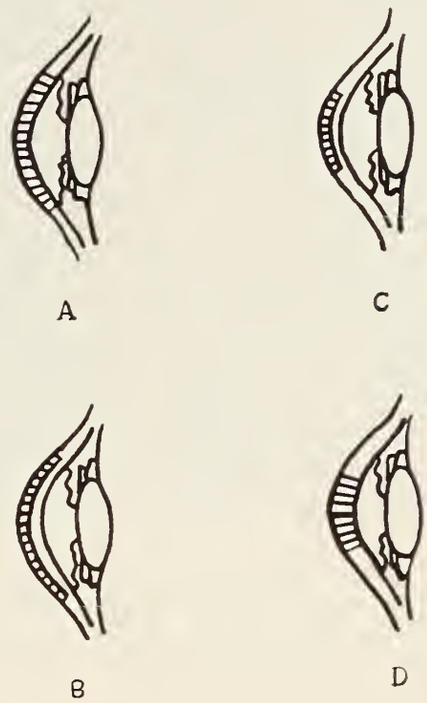

Fig. 1. (A) Total corneal transplant. (B) Total lamellar corneal transplant. (C) Partial lamellar corneal transplant. (D) Partial penetrating corneal transplant.

indeed a very important step in the final result. The utmost co-operation on the part of the patient is needed. This cannot be obtained in the very young.

The mental attitude of the patient must also be explored to some degree. People who have lost considerable vision or do not have vision on a par with others are usually bitter and resentful against the world. On the surface these patients may appear tranquil and well adjusted but usually they are not. Particularly is this true of patients with conical cornea. The majority are highly strung, nervous, maladjusted, and the uncertainty in their minds of the success of the operation adds to their difficulties. A patient badly adjusted to his environment and surroundings, who has difficulty holding a job in competition with people who have normal vision, is a difficult one to handle postoperatively, particularly when he is lying in bed with both eyes bandaged and his mental activity running rampant.

In last analysis all cases must be considered strictly on an individual basis, studied thoroughly, mulled over, rechecked, and the prognosis should always be guarded.

Fig. 2. Case 1. W.P., a young man twenty-four years of age. Keratoconus-severe, progressive. Vision OD, light perception and projection; OS, fingers at 4 feet. Extreme scarring of tip of cone. Note the bulging forward of the cornea of the unoperated OS (above). Right eye operated on (below) with insertion of 5 mm. graft and resultant vision 20/40. Patient has returned to work and the eye has maintained vision of 20/40 (two years follow-up).

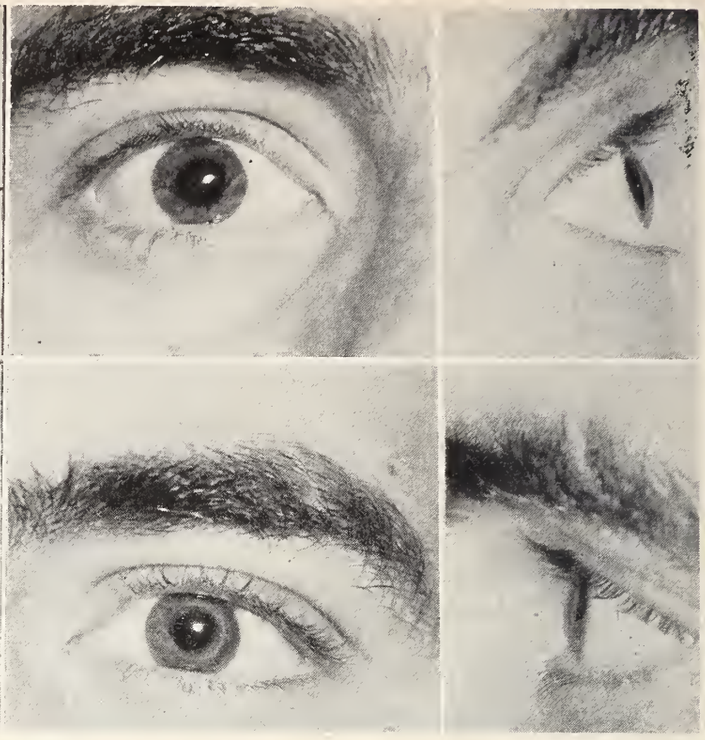

Fig. 3. Case 2. M.W., a young man, aged twenty-four. Keratoconus, severe, progressive. Vision OD, 20/600; OS, light perception and projection. Extreme scarring of cone and surrounding cornea, OD (unoperated) (above); OS (below) operated on with insertion of 6 mm. graft and resultant vision of 20/20-3. Patient working and OS has maintained 20/20-3 (Follow-up one year).

When a case is first seen, it must be estimated clinically as to prognosis, and from this standpoint all cases roughly into three classifications as follows:

Group I. Favorable.
Group II. Partially favorable.
Group III. Unfavorable.

Group I, the favorable group, can be further subdivided into three subgroups, namely, conical cornea (keratoconus), inactive interstitial keratitis, and those eyes that have a central scar with a surrounding good healthy cornea. Further criteria that must be fulfilled in this group are the absence of any active corneal disease, no increase in intraocular pressure, and no vascularization of the cornea or at least a minimum of inactive superficial vessels. It is not uncommon in these types of cases to obtain a resultant vision anywhere from 20/50 to 20/20.

Interstitial keratitis, regardless of whether it may be caused by syphillis, tuberculosis, trauma, or even if the etiology is unknown, if not too far advanced, lends itself quite well to corneal transplantation. However, these cases should not be operated on until nature has had a chance to do its share of healing. For example, many cases of interstitial keratitis if treated early and vigorously may attain a resultant vision of 20/70 even after the patient had only light perception when first seen. At least a year should elapse after the acute infection before an operation should be considered.

In the second group, the partially favorable, fall the large number of corneal dystrophies, with two exceptions, which will be mentioned later.

The corneal dystrophies are disturbances of the nutrition of the corneal tissue, chronic in nature, which run a slow, hardly perceptible, continually progressive course, resulting in opacification of the cornea. They show no evidence of any of the inflammatory symptoms such as conjunctival injection, blepharospasm, lacrimation or pain. Rather they run such an extremely slow course that the patient may not even be aware of their existence until some vision is lost. The various types to be considered in this group are: Salzman dystrophy, zonular opacity, Groenow's nodular dystrophy, lattice shaped dystrophy, Fleischer dystrophy, and idiopathic dystrophies, namely, those to which no etiology or classification could be applied when first seen for examination. The two exceptions previously mentioned are Fuchs' type of dystrophy and some types of fatty dystrophies. These should not be operated on since their measure of success does not warrant it.

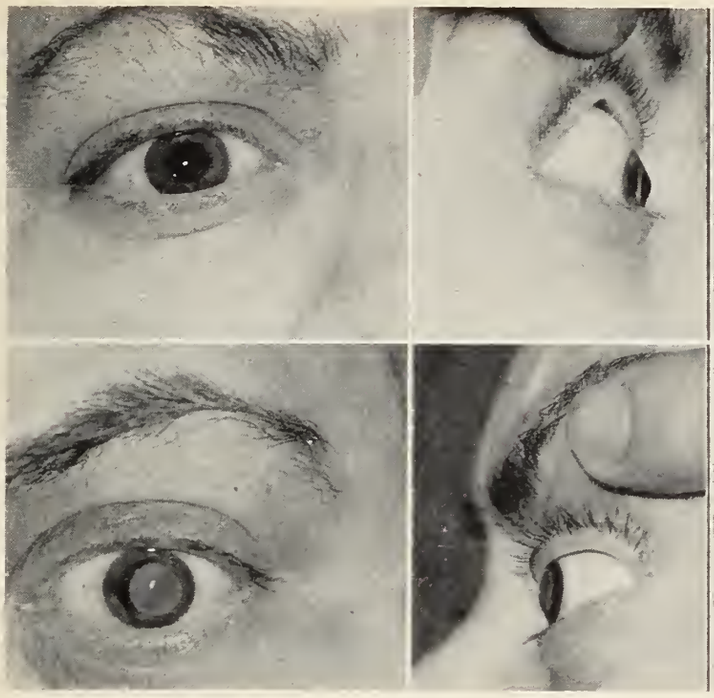

Fig. 4. Case 3. A woman, aged forty-seven. Keratoconus, far advanced. Vision OD, light perception and projection; OS, light perception and projection. Right eye (above) unoperated, showing the extreme conical cornea. Left eye (below) operated with insertion of 5.5 mm. graft. Due to secondary iritis and blood vessel invasion of cornea, resultant vision OS, light perception and projection with improvement of field of vision. There was some clearing of the graft when last seen (follow-up eighteen months).

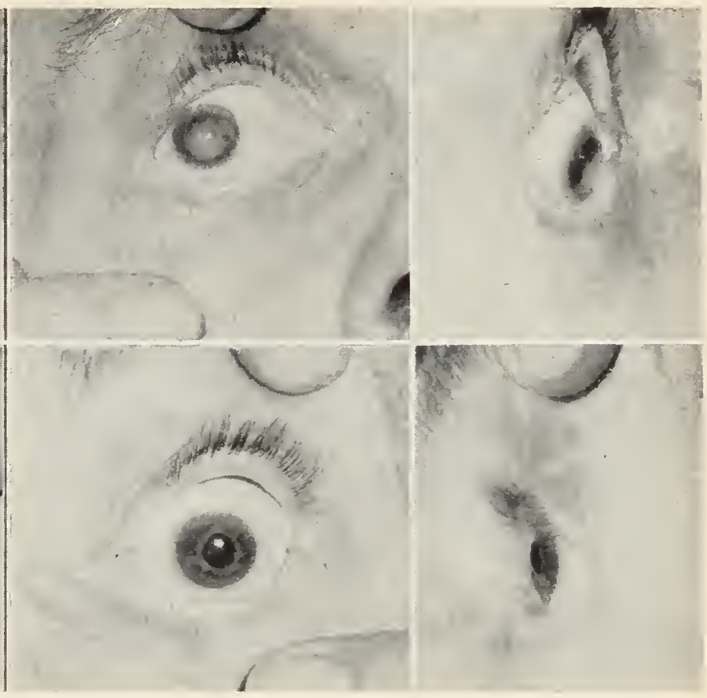

Fig. 5. Case 4. A man, aged sixty-three. Dystrophy of cornea, cause unknown. Vision OS, light perception and projection. Both views are of left eye before surgery (above). After insertion of 5 mm. graft and resultant vision of 20/70-2 (below). Patient able to return to work in motor plant (follow-up thirty months).

The third group includes a various assortment of unrelated pathological conditions which have been proven by actual operation to offer only a very small percentage of success. They are as follows:

1. Eyes with nystagmus.
2. Chemical burns (lime burns).
3. Eyes with a large degree of vascularization.
4. Inflammation of the uveal tract.
5. Corneal scars extending to periphery.
6. Dystrophia adiposa.
7. Fuchs' dystrophy.

Eyes with Nystagmus.—Although these types of cases may appear externally normal, the fact that they exhibit nystagmus makes them unsuitable for corneal transplantation. Usually this eye is amblyopic, and the most that can be expected is enlargement of the field with only slight improvement of central vision.

Chemical Burns.—Failures in chemical burns are due to the fact that there is a marked disturbance of the metabolism of the cornea. Furthermore in chemical burns, particularly in lime burns, the entire thickness of the cornea is involved, and usually the entire diameter of the cornea is involved right up to the limbus, and this is further complicated by the presence of many vessels.

Large Degree of Vascularization.—The presence of blood vessels within the cornea proper cuts down markedly on visual acuity, for example, as in far-advanced invasion of blood vessels in interstitial keratitis. So it is with any type of vascularization in which the vessels are deep within the stroma and in which many vessels are present.

Inflammation of the Uvea.—In any inflammation of the uveal tract, whether it be a posterior (choroiditis) or anterior uveitis, there is always the danger that the inflammation may recur, but several cases have been reported in which there have been good visual results.

Corneal Scars Extending to Limbus.—Corneal scars, whatever the cause may be, if they extend to the limbus have been proven to be unsuitable for operation.

Dysthrophia Adiposa.—The success of this type of case depends on the extent of the infiltration of lipoid tissue into the cornea. A few successful cases of this type have been reported, but in the large majority of grafts are usually invaded with adipose tissue.

Fuchs' Dysthrophy.—There have been no successful cases reported with this type of dystrophy.

Fig. 6. Case 5. A boy, aged seventeen. Keratoconus, congenital, with ambylopia and nystagmus. Vision OD, light perception and faulty projection; OS, light perception and faulty projection. Left eye operated on with insertion of 6 mm. graft. Patient had not seen well since birth, now gets about by himself.

From the previous classification of cases it can be prognosticated to some degree what cases are suitable for keratoplasty and approximately the degree of success which may be expected in each case.

Technique

The actual performance of the corneal transplantation operation is an individual technique. What may be difficult in the hands of one operator may be quite easily performed by another. The technique one wants to adopt or follow should be actually worked out in laboratory on animals (rabbits) until the operator has perfected his own technique.

Whatever technique the operator may adopt, he must give some thought to the following basic considerations:

Is the graft to be round or square?
Is the graft to be beveled or not?
What size should the graft be?
What type of suture should be used?
Should the pupil be dilated or contracted?

Round or Square.—It is of no great consequence whether the graft is cut round or square. Cosmetically the round graft is a better appearing one, and it is easier to cut with the hand trephine. The square type of graft as advocated by Castroviejo, cut by an adjustable double-bladed knife, is a difficult operation to perform for the occasional operator, although as far as final visual results are concerned there is no ultimate difference. There are no indications for the round graft in preference to the square, or vice versa, since both types have worked out satisfactorily.

Bevel or Not.—Although Thomas of England (Wales) still cuts his donor grafts slightly smaller than the recipient bed and with a bevel, the general trend today is to cut both donor and host with the same trephine. Since the cornea is convex in both meridians (namely, for 6 to 12 o'clock and 3 to 9 o'clock) the trephine must of necessity cut the cornea with a slight bevel.

Let us suppose for a moment that the cornea were flat.

If cornea were flat, a equals b, and there is no resultant bevel (Fig. 7).

However, since cornea is convex as in B, a is larger than b, and there must be some bevel present.

It has always been feared that the graft might fall into the anterior chamber, but there is no danger of this. Rather is the opposite to be feared. Within a short time after the operation the eye rebuilds its former contour and pressure is exerted on the graft against its endothelial surface so that within eight to ten days suture marks can be seen on the epithelial surface of the graft, proving this to be true.

Size of Graft.—In the early days the size of the transplants were cut about 4.0 to 5.0 mm. Today the trend is toward larger grafts, usually 6.0 to 7.0 mm., or even slightly larger. This is especially true in cases of conical cornea where the entire cone of the involved eye must be resected, sometimes necessitating a graft of 7.0 mm. or even larger if necessary. There is no contraindication to these larger grafts, but iris incarceration must be guarded against. In the majority of cases the size of the graft must be governed by the size of the area involved in the diseased cornea because the edges of the graft must be in normally healthy tissue of the recipient.

Sutures.—No graft should be inserted without the use of sutures. Whether they are direct sutures from donor to host or overlying sutures is a matter of the operator's choice. The European school favors direct suturing, whereas in this country

overlying sutures are largely used. A combination of both types is also indicated in certain cases. The one continuous suture of Castroviejo is an excellent one, as illustrated in Figure 8.

So also are the two separate figures of eight

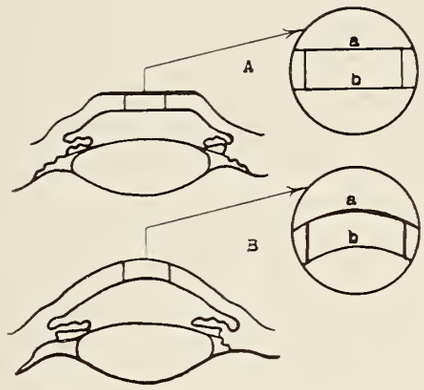

Fig. 7.

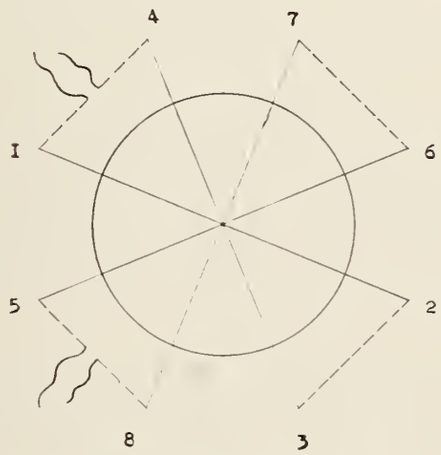

Fig. 9. Paton suture.

sutures advocated by Paton of New York City (Fig. 9).

The argument that one continuous suture (Fig. 10) gives a more even distribution of the pressure over the graft than two separate sutures is largely academic since clinically both work out well. It is, however, always wise to have two separate sutures because one may be inadvertently cut during the operation. There are also several other types of sutures used that are excellent.

In all cases, after the graft is outlined, another incision 1.0 mm. larger is made into the cornea to a depth of 2.0 to 3.0 mm. (two or three turns of trephine). This procedure was discovered quite by accident. In the first two transplants performed a 6.0 mm. trephine was used. It was then decided to limit the size to 5.0 mm. As the postoperative course was observed, superficial blood vessels were observed to grow inward toward the graft but they ceased abruptly at the trough made by the large 6.0 mm. trephine and subsequently these vessels receded. This procedure is used routinely now on all cases. We have not seen this procedure described in ophthalmic literature.

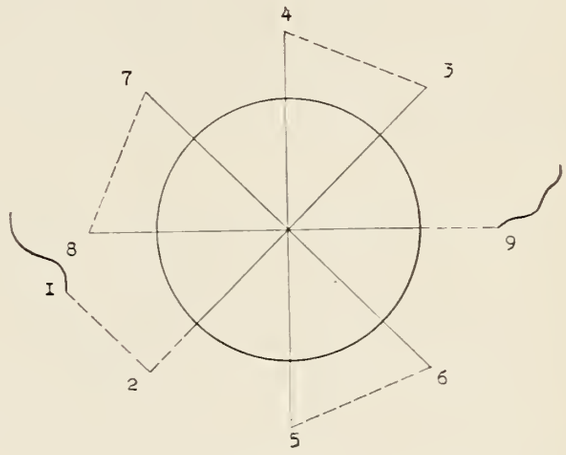

Fig. 8.

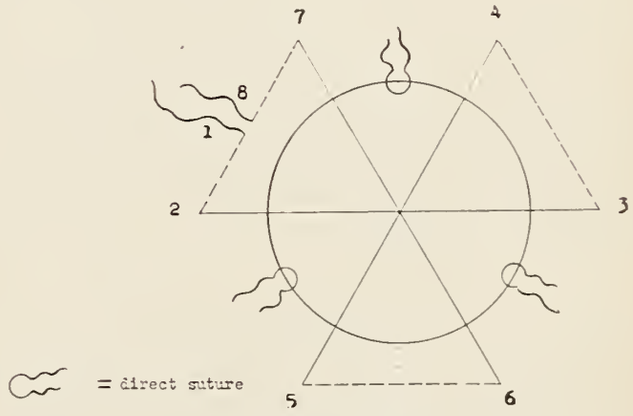

Fig. 10. Croll suture.

Size of Pupils.—This will be discussed under complications.

No ointment is inserted after the operation is completed, since globules of ointment might become lodged between the donor and host and thus retard healing.

Complications

In any ophthalmic surgery we encounter complications, and this is particularly true in the corneal transplantation operation.

Complication may be encountered at any time during or after the operation, and for convenience sake they will be discussed in that order.

It would be wise and quite convenient to have all the complications occur while doing this type of surgery on animals in the laboratory so as to know the method and technique of dealing with them. Getting into complications in ophthalmic

surgery is an easy procedure, but the getting out of them successfully is another matter.

The first thing to do is to inspect the donor eye, personally, to see that it is in good condition and suitable in all respects for the operation to be performed. This simple requisite which is quite important and only takes a few minutes will sometimes avoid an embarrassing situation. A donor eye with the epithelium slightly damaged is still suitable for use.

Complications Occurring at Time of Operation: Placing of Incision.—One of the pitfalls that must be guarded against is the placing of the initial incision on the cornea of the recipient. This is done with a few turns of the trephine and then stained with flourescein so as to make the incision more visible. The flourescein is immediately washed off. If after placing the incision it is seen to be improperly situated, it can be properly placed or centered without any untoward effect. This must particularly be guarded against in cases of conical cornea where the incision must include the entire bulging forward of the weakened cornea, well into the normal healthy tissue, even if it may be necessary in some cases to use a 7.0 mm. trephine or even larger.

Perforation into Anterior Chamber.—In the placing of the sutures, the needle may perforate into the anterior chamber so that the aqueous will ooze out slowly, making the eye soft and completion of the operation difficult. There are ways out of this dilema. The operation can be postponed twenty-four hours or longer, which is the safer and more practical method, or the needle may be withdrawn immediately and a new insertion may be made superficially into the cornea. If the latter method is adopted greater care must be taken so that the underlying tissue, namely, the lens and iris, are not injured. Both methods have been proven to be clinically good.

Lens Injury.—This is one of the most frequent and serious complications that may occur. If the patient is young and the lens is soft, no attempt should be made to remove it, in any manner, since it will absorb and not interfere with the taking of the graft. In the older age group where the lens has opacified to some degree, it is best to remove the lens extracapsularily through the opening of the recipient cornea just before the graft is slipped into place. This will keep intact another barrier so that the vitreous will not herinate into the anterior chamber and endanger the success of the graft. If the lens is injured and it is necessary to remove it, use additional direct suturing of graft to host, one in each of the four quadrants of the eye.

Anterior Synechiae.—The formation of anterior synechiae is even a more serious complication than that of lens injury, because wherever the synechiae touch the graft it will become opaque. At present there are two opposing schools of thought regarding the size of the pupil at time of operation. The one school advocates a widely dilated pupil, whereas the other group insists on a small contracted pupil. The future findings with carefully kept records will prove which school of thought will produce the least incidence of anterior synechiae. A procedure that combines the principals of both schools is to begin the operation with a small contracted pupil so that the lens will be protected and just before the graft is slipped into place, insert a few drops of sterile atropine directly into the eye. This will dilate the iris very quickly and thus prevent the formation of any anterior synechiae.

Removal of Sutures.—At the time of the removal of the sutures (usually tenth to twelfth postoperative day) the anterior chamber may collapse. If this occurs, it indicates the presence of a small leak, that is, an area of imperfect union between graft and host, which has hitherto kept the anterior chamber intact with a plug of fibrin (or mucous). A direct suture at the point of weakness can be inserted immediately, or conservative treatment may be carried out, since the graft will re-attach without any impairment of vision.

Removal of Anterior Synechiae.—If anterior synechiae are present, they must be dealt with depending on their size. Since all synechiae have a marked tendency to opacify the graft, they should be operated on but only after the fourteenth day, that is, within the third week, because it takes about fourteen days to establish a firm union between graft and host. A minimal adhesion is treated with a cycloidalysis procedure and the synechiae are separated with a spatula through this route, followed by the injection of air with a Randolph perforated canula. However, if the syne

chiae are very large, the eye must be opened and a large iridectomy performed.

Glaucoma.—If postoperative glaucoma does occur, the condition is treated similar to any other type of postoperative glaucoma, namely, with miotics and heat. In the congestive type a large broad-base iridectomy is preferable, whereas in the noncongestive type which persists a trephine or iridenclesis is recommended.

Edema.—Postoperative edema of a graft that has taken well may persist even as long as three to four months. Clinically, the eye looks good, but on further examination under the slit lamp there is a generalized bedewing of the upper layers of the graft that materially interferes with vision. There is no specific treatment for this condition; however, it usually will clear.

Results

In all branches of ophthalmic surgery the question of prime importance is, namely, the percentage of success. What then are the results with the corneal transplant operation.

At the International Symposium on Corneal Surgery held in New York City, in 100 cases operated on by Dr. Paton, selected at random by an independent observer, there were: 55 per cent clear (this was with no selection of cases), and 45 per cent cloudy.

Further conclusions from this are:

1. There is no definite relation between age and results.
2. No results in Fuchs' dystrophy and chemical burns.
3. Best results were seen in cases of central opacity of the cornea. If one half the area of the cornea was involved, grafts were 68 per cent clear. If over half of the cornea was involved, the percentage dropped to 36 per cent.
4. As to vascularization the following results were obtained:

No vessels, 71 per cent successful.
Few vessels, 45 per cent successful.
Moderate amount of vessels, 22 per cent successful.
Extensive vascularization, 0.

With selection of cases the following are the results:

Conical cornea, 65 per cent.
Dystrophy-heredity, 58 per cent.
Interstitial keratitis, 49 per cent.
Scar nonspecific, 46 per cent.
Active keratitis or ulcer, 23 per cent.
Scar chemical, 20 per cent.
Scar traumatic, 18 per cent.
Scar gonorrhea, 87 per cent.
Fuchs' dystrophy, 0 (10 cases).

Résumé

1. Five cases of corneal transplants are presented, preoperatively and postoperatively, with results.

2. A review of the literature on this subject is presented in a concise manner.

3. The evaluation of the operation is traced from its early inception to our modern trends.

4. The various types of transplants are discussed. The Lamellar type is not fully discussed since space does not permit. The European school, and particularly the French school, advocates this method and reports excellent results.

5. Various techniques, selection of cases and complications are discussed.

6. Percentage results that can be expected in the various groups are reviewed.

Corneal transplantation is an operation that should be in the field of any ophthalmologist who takes the trouble to perfect himself in it.

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MSMS

SICKNESS

Our health is our sound relation to external objects; our sympathy with external being. A man wakes in the morning sick with fever; and he perceives at once he has lost his just relation to the world. Every sound in the lower parts of the house, or in the street, falls faint and foreign on his ear. He begins to hear the frigid doom of cold Obstruction. "Thou shalt have no part in anything that is done under the sun."—EMERSON.

Chloromycetin as a Treatment for Pertussis

Continued Observations

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THIS PAPER reports additional experience[5] gained in the treatment of pertussis with chloromycetin. The majority of these cases reported were treated in the Department of Cochabamba, Bolivia. Published statistics[3] confirm the writer's observations that the disease in this area is of high virulence, and the death rate for all cases averages 10 per cent. This high mortality seems not to be influenced by the wide range of altitude, nor by the economic level of the patient's family. The Bolivian epidemic, during which this study was made, began late in June and continued through November, 1949.

During the period of this study the following facts were established regarding the epidemic:

Untreated young children (first five years) were found to have a moderate to high temperature (37.5° to 39.5° C.) for a period of usually two weeks during the early stage of the disease, and the paroxysmal state averaged more than six weeks. The death rate of untreated patients under five years of age was 20 per cent.

Treatment with high potency vitamins gave some amelioration but no curative effect. Penicillin and streptomycin were of some aid in controlling the complications, but of doubtful value in shortening the disease. Prior to the use of chloromycetin, fair results were obtained in some cases by painting the throat with iodine preparations.

Early laboratory work of Smith and associates[7] indicated the possible usefulness of chloromycetin in pertussis. This work was confirmed by McLean and associates[4] and Sarber and associates.[6] Alexander, Leidy and Redman[6] found the effectiveness of chloromycetin against H. pertussis and H. parapertussis *in vitro* to be high when compared with the other antibiotics studied.

Degenhardt[2] reports the case of a child, five and one-half months old, suffering from severe pertussis successfully treated with chloromycetin.

TABLE I. PERTUSSIS CASES TREATED WITH CHLOROMYCETIN

Age Group	No. of Patients	Method of Administration	First Dose (gm.)	Daily Maintenance (gm.) Average	Total Dose (gm.) Average	Temp. Normal Marked Improvement Average	Symptom Free (Days)
Less than 6 months	10	Oral	0.25	0.125 q.i.d.	2.0	43 hrs.	3.4
	4	Sup.*	0.25	0.25 b.i.d.	1.75	24 hrs.	4.5
1 Year	8	Oral	0.25	0.25 t.i.d.	3.4	30 hrs.	5.0
	4	Sup.*	0.25	0.25 t.i.d.	2.17	48 hrs.	6
2-3 Years	14	Oral	0.25	0.25 t.i.d.	3.1	42 hrs.	4.2
4 Years	7	Oral	0.25	0.25 t.i.d.	3.4	56 hrs.	4
5-9 Years	10	Oral	0.25	0.25 q.i.d.	5.5	62 hrs.	5.3
	5	I.V.	0.3	0.3 q.i.d.	3.48	48 hrs.	4

*Given as rectal suppository.

Method of Study

Since the supply of chloromycetin was limited and there was such a large number of patients, only those cases seriously ill were treated. The diagnosis was confirmed by cough plate or swab cultures. All patients treated below five years of age, and most of those above this age, had fever.

Sixty-two cases were treated in this report. Chloromycetin was given in varying doses (Table I) depending on the weight of the child, and was administered by mouth in most cases. In certain patients, as indicated, the drug was given as a rectal suppository or as an intravenous injection dissolved in propylene glycol.

Results

Ten brief case records are included as typical examples.

Case 1.—Two-month-old male on artificial feeding, well nourished, sick for five days, during which time was treated with vitamins C and K without results. Paroxysmal stage had begun with twenty to thirty paroxysms per day. Fever 38° C.

Treatment: Chloromycetin, first dose 0.25 gm., followed by doses of 0.125 gm. every eight hours.

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On the second day fever had disappeared and the paroxysms greatly decreased. Improvement continued.

Fourth day, the paroxysms had disappeared and the patient appeared cured. Some coughing remained but only of a light irritant type. Two weeks later patient had had no relapses and appeared to be in excellent health.

Total dose: 1.75 gm. chloromycetin, oral.

Case 2.—Female, three months old, bottle fed, fairly well nourished, low grade fever less than 38° C. This patient was in the earliest paroxysmal stage with paroxysms averaging twenty-five per day.

Treatment: Chloromycetin, 0.25 gm. for first dose and 0.125 gm. every six hours around the clock.

Second day, temperature returned to normal. Fourth day, the paroxysms had almost disappeared. During the night of the fourth day, patient had two small paroxysms. Fifth day, no paroxysms. Follow-up indicates that patient is free of pertussis and has had no further paroxysms.

Total dose: 2.5 gm. chloromycetin, oral.

Case 3.—Female, three months of age, breast fed, contracted pertussis from mother. Catarrhal stage quite severe with temperature ranging between 38° and 39° C. and symptoms resembling bronchial pneumonia.

Treatment: Chloromycetin, first dose 0.25 gm. followed by doses of 0.125 gm. every six hours around the clock.

Second day, temperatures became normal during the day and the patient appeared much improved. Fourth day, paroxysms were greatly reduced. A great improvement in general condition.

Fifth day, paroxysms had disappeared and there was no indication of a relapse during the several weeks follow-up.

This patient showed symptoms of nausea when given chloromycetin mixed with fruit juice, evidently due to the objectionable taste.

Total dose: 2 gm. of chloromycetin, oral.

Case 4.—Female, six years of age, well nourished, beginning the paroxysmal stage of pertussis with twenty paroxysms per day.

Treatment: Intravenous chloromycetin, 0.30 gm. in propylene glycol administered every three hours.

Second day, patient had four paroxysms.

After the fourth post-treatment day, patient was in uneventful convalescence.

Total dose: 3 gm. chloromycetin, intravenous.

Case 5.—Female, seven years of age, well nourished, began treatment during the first week of the paroxysmal stage of pertussis during which she was having twenty to thirty paroxysms per day. Patient was having frequent epistaxis.

Treatment: Intravenous chloromycetin dissolved in propylene glycol, 0.30 gm. administered every five hours for first forty-eight hours.

Third day, epistaxis had disappeared and the number and intensity of the paroxysms had diminished. Fourth day, the paroxysms disappeared and the patient made an uneventful recovery.

Total dose: 3.0 gm. chloromycetin, intravenous.

Case 6.—Female, eight years of age, poorly nourished. This patient was extremely weak due to the thirty to fifty paroxysms per day she had suffered and the vomiting which accompanied each paroxysm.

Treatment: Intravenous chloromycetin, 0.3 gm. every five hours for ten doses.

Second day, improvement was noticed in the patient's physical condition.

Fourth day, paroxysms disappeared on this day and patient entered into an uneventful convalescence.

Total dose 3.0 gm. chloromycetin, intravenous.

The following cases are presented as representing the most resistant to chloromycetin therapy, insofar as they were slowest to respond:

Case 7.—Female, seven years of age, had had whooping cough for one week. Vitamin C and tincture of iodine in glycerin of no benefit. Chloromycetin, 50 mg. per kilogram bodyweight, given in equally divided doses every six hours for five days.

Improvement was noticed at the end of the second day when the paroxysms gradually became less frequent and of less intensity. The paroxysms disappeared on the eighth day, leaving a light hacking cough.

Total dose: 6.0 gm., oral chloromycetin.

Case 8.—Male, one year old, in grave condition with paroxysms following each other at short intervals, during which the infant was apparently dying from asphyxia.

One capsule of chloromycetin (0.25 gm.) given every six hours.

Improvement began the second day and gradually improved until, on the twelfth day, all paroxysms had disappeared.

Total dose: 9.0 gm. chloromycetin, oral.

Case 9.—Male, seven years of age, with severe attack of whooping cough, was in second week of disease.

Chloromycetin, given by mouth, 50 mg. per kilogram bodyweight per day, divided into equal doses every six hours. This case appeared to be by far the most resistant of all cases studied, and did not show marked improvement until the ninth day of treatment.

Twelve days after beginning treatment, the paroxysms had disappeared.

Total dose: 9.0 gm., oral chloromycetin.

Case 10.—Male, one year old, in first week of pertussis attack.

Chloromycetin given by inserting the perforated capsule as a rectal suppository. One capsule (0.25 gm.) given every six hours.

Steady improvement was observed until the seventh day when all paroxysms had disappeared.

Total dose: 6.0 gm. chloromycetin.

Observations

Fever, when present, disappeared during the second day of treatment, and a definite decrease in the number of paroxysms could be observed on the third day.

Paroxysms decreased in number until they disappeared completely. The time of disappearance varied from the third to sixth day after treatment was initiated. In only four cases did the paroxysms extend beyond six days after treatment was begun. It was noted, however, that a light cough remained for several days. This was thought to be due to the residual inflammation remaining in the tissues.

In one case there appeared to be a relapse of short duration a few days after treatment was discontinued. This patient received a small dose of chloromycetin, and it was judged to be inadequate. A second course of treatment terminated the attack.

Spot check of patients by cough plate one week after treatment indicated all were free of infection. In a few children under six months of age there were mild symptoms of nausea. This was no doubt due to the fact that the Kapseals were opened and the contents mixed with substances such as honey or orange juice for administration, and the resulting disagreeable taste caused the symptoms.

It was decided that the dose of drug used was the minimum amount that would be effective.

Conclusion

1. Continued experience demonstrates that chloromycetin is an effective treatment for pertussis.
2. When administered as a rectal suppository, or intravenously the results are equal to oral medication.
3. Untoward reactions are negligible.

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Chickenpox and Herpes Zoster

Simultaneous Occurrence in Same Patient

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A RELATIONSHIP between chickenpox and herpes zoster has been accepted from the often reported occurrence of both diseases almost simultaneously in different members of the same family. It is common to have an increase in cases of herpes zoster when an epidemic of chickenpox is present, and many instances suggesting cross communicability of the two diseases have been reported. Persons with herpes zoster can apparently transmit a disease which is indistinguishable from chickenpox, though the communicability in this direction is not high; conversely, persons with chickenpox can be the almost certain cause of herpes zoster in others. The "unitarian" theory regarding the causative virus of these two diseases may be summarized as follows:[2] Infants inoculated with vesicle fluid from herpes zoster have been observed to develop, in two to three weeks, typical lesions of chickenpox and have, in turn, been the obvious contact for other cases of chickenpox. The incubation periods for the two diseases appear to be identical. Persons recently recovered from either disease appear to have some transient immunity to the other, though this immunity is certainly not as complete or lasting as the specific immunity conferred by each. Herein lies the most serious objection to the "unitarian" theory of one causative virus for the two diseases. The virus of herpes has been cultivated;[1] that of chickenpox has not. The occurrence of the two diseases simultaneously in the same subject seems to be worth reporting. From the clinical standpoint, there could be no question of the identity of the two diseases. The case history follows:

C.E.B., age fifty-nine, experienced a low backache of mild severity on May 23, 1949. This was worse, but not incapacitating, on May 24. On May 25, the pain was much worse, and now was definitely unilateral with radiating pains from left lumbar to left groin area. An electric heating pad was applied and left on nearly all night of May 25, the pad remaining with only slight change over the area from left lumbar, around left flank

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and downward to left inguinal area. Emperin compoundhis home. There is none other known to me which might was taken and patient slept fairly well but awakened on have added information of value. Certainly a complete May 26 to discover a band of erythema thickly dotted blood count could hardly have added anything as the with small vesicles extending over roughly the area white count tends to be normal or lowered in chicken-

Figs. 1 and 2: These photographs taken on the seventh day of illness and the fourth day after the eruption of the band of zoster lesions, show both eruptions. The face and trunk had approximately thirty-five lesions quite typical of chickenpox. It is likely that the extent and severity of the zoster lesions was increased by application of the electric heating pad. Virus could not be cultivated from the herpetic vesicles.

covered by the electric pad. There was no itching, mild pain on movement and moderate pain on pressure on this area. Patient assumed this to be a burn because of the pad, but was puzzled that the low temperature of the pad would cause this. The local discomfort was not sufficiently great to prevent the patient teaching his classes and conferring with students. On May 27, two vesicles appeared on the face and four or more on the back at some distance from the vesicles in the supposed burned area; he felt worse than previously, but did not have elevated temperature, the patient thought. On May 28, he felt worse and slept part of day and noted several new vesicles on face, back, and chest. He had no appetite and for the first time felt feverish and found temperature to be 101° F. at 5:00 p.m. On May 29 temperature at 9:00 a.m. was 102°. He was seen by the family physician, who diagnosed herpes zoster and raised a question concerning nature of vesicles on face and trunk. A few more of the single vesicles appeared on this day.

On May 30, I saw the patient for the first time and confirmed the diagnosis of herpes zoster and chickenpox. The physical examination revealed nothing germane to this report except the cutaneous lesions, which fortunately are well shown in the accompanying photographs which were taken on the seventh day of illness. There were in all approximately thirty-five scattered lesions in various stages of development and perfectly typical of chickenpox. The band of erythema from left lumbar to left inguinal region was dotted by steel pin-head to glass pin-head sized vesicles, many of which were coalescent. (Crusts and serum from these lesions were obtained for virus culture by Dr. Thomas Francis, Jr., of the University of Michigan School of Public Health. Virus could not be recovered from this material). No other laboratory work was undertaken as the patient was attended in pox and normal to elevated in herpes zoster.

The patient made an uneventful recovery over the course of nearly six weeks. Some pain in the back continued and the area of herpetic lesions continued to be painful when touched. The trouser band and belt was poorly tolerated even after the patient felt much improved. Some ease of fatigue was definite for six to eight weeks. It is of interest that best relief for the hyperesthesia and pain of the zoster lesions was obtained from the application of 3 per cent nupercaine (dibucaine) ointment. This has to be made up specially by the pharmacist as the regular nupercaine ointment is 1 per cent strength.

Although contact with anyone having chickenpox was at first thought unlikely, it was later ascertained that two of the patient's students had dropped out of class approximately two weeks before and were in isolation because of chickenpox. The patient reported that he was sure he had had chickenpox over fifty years previously.

Conclusion

What seems unmistakably to be an instance of simultaneous occurrence of chickenpox and herpes zoster in a fifty-nine-year-old man is reported. The patient felt sure he had had chickenpox as a boy. There was definite exposure to two cases of chickenpox approximately two weeks before onset of patient's illness. Photographs are presented.

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Histamine Antagonists

XVII. Experimental and Clinical Experience with N,N-methyl-N'-(4-fluorobenzyl)-N'-(2-Pyridyl)-Ethylenediamine

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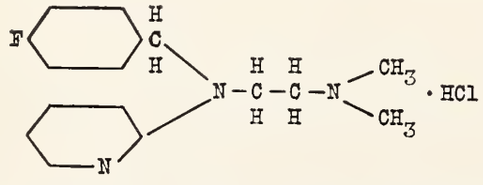
IT IS GENERALLY agreed that a more favorable potency-toxicity ratio would be a desirable feature in the development of a new antihistaminic drug, and would justify the addition of still another compound to the large list already available. Vaughan and his associates,[6] working in the laboratories of the American Cynamid Company, experimented with halogenation of a number of compounds. Pyribenzamine halogenated in the 4-position of the benzyl group showed the highest activity. The further interesting observation was made that this activity increased as the electronegativity of the substituent increased and its atomic weight decreased from iodine to fluorine. Dihalogenation was disadvantageous in the one compound tested. By the histamine aerosol technique they found the fluorine compound to be three to four times as potent as pyribenzamine, chlorine two to three times as potent, bromine of the same potency, and 2-chlorine of 0.5 potency of pyribenzamine.

Litchfield and his associates[4] examined the pharmacological properties of the fluorine derivative, N, N-methyl-N'-(4-fluorobenzyl)-N'-(2-pyridyl)-ethylenediamine, which for brevity will be referred by their designation of p-fluorobenzyl-DPE.



The contraction of the guinea pig ileum from 4.0 γ histamine was inhibited by 0.4 to 2.0 of the drug, and recovery was prolonged. In the histamine aerosol experiment in the guinea pig the compound was twice as active as tagathen. By the oral route in protection against intravenous histamine it was two to four times as effective as pyribenzamine. The LD_{50} in mice by intraperitoneal administration was 83 mg. per kilogram, somewhat less toxic than pyribenzamine but more toxic than tagathen.

Experimental Data

The above data and the compound p-fluorobenzyl-DPE were presented to me in the summer of 1948 for consideration for further experimental work and possible clinical use. Preliminary trials of local inhibition of the histamine flare according to our method[5] indicated that we were dealing with a potent antihistaminic compound, the test resulting in an assay of 200 per cent potency on the basis of pyribenzamine as the standard. In unpublished experiments[1] in which a similar histamine flare inhibition was measured it was determined that a 50 mg. dose of the drug taken orally produced histamine inhibition comparable to that produced by 100 mg. of pyribenzamine.

In the prevention of bronchospam in guinea pigs from aerosolized histamine, according to the technique we have previously described,[3] the effective intraperitoneal dose was 1 mg. per kilogram, identical with the dose required for pyribenzamine. The concentration of the aerosolized drug required to produce the same protection against aerosolized histamine was 0.25 per cent, compared to 1.0 per cent required for pyribenzamine. The effect of the intraperitoneal injection lasted seven hours while the aerosol effect lasted ninety minutes, both figures comparing favorably with pyribenzamine. An aerosol from a 10 per cent solution of this compound was well tolerated by the guinea pigs for at least five minutes. A dose of 0.1 mg. of p-fluorobenzyl-DPE per kilogram intraperitoneally protected five out of five pigs against 1 MLD_{100} histamine intravenously, while a dose of 0.01 mg. protected one out of five animals. Against this particular type of effect this compound was more effective than pyribenzamine. In a small series of animals protection against anaphylaxis was not particularly impressive. The latter findings were rather puzzling and have not been checked.

Clinical Results

The encouraging experimental findings influenced us to begin clinical therapy in the autumn of 1948.

The compound p-fluorobenzyl-DPE was administered in tablet form in the majority of instances,

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TABLE I. DOSES OF P-FLUOROBENZYL-PDE

	Children	Adults
15 mg.	8	8
Not helped	0	0
Helped	8	8
30 mg.	37	74
Not helped	11	31
Helped	26	43
50 mg.	31	92
Not helped	13	34
Helped	18	58

TABLE II. P-FLUOROBENZYL-DPE

SPEED, DURATION OF EFFECT AND PERIOD OF USE

Speed of Action		Duration of Effect		Period Drug Was Taken	
½ hour	17	3 hours	3	Less than 1 week	107
1 hour	13	3-6 hours	35	1-6 weeks	102
2 hours	1	6-8 hours	4	1½-3 months	21
				More than 3 months	8

the patient being instructed to take it as needed. In some cases of nasal allergy instructions were given to take the medication on retiring. The first tablets available were 15 mg. size. The patients were instructed to take one to four tablets at a dose. However, it is our experience that the average person is disinclined to take three or four tablets at a time, because of the impression that he is taking an excessive dose. In this way some of the data were unfavorable since some patients who failed to obtain results from 15 to 30 mg. did not try higher doses from which better results might have been possible. Later, for some period only 50 mg. unscored tablets were available. Again this served as a derogatory influence on the reported figures: some of these patients undoubtedly could have obtained relief with doses smaller than 50 mg. When both sized tablets were available the patient was usually given some of each and was instructed to try 30 mg. first. If the latter dose was insufficient he would try 50 mg. If the symptoms were well controlled he was instructed to try also the 15 mg. dose.

Whenever possible attempts were made to compare the effectiveness of this drug with pyribenzamine or other standard antihistamines; in many instances comparisons were made with a group of antihistaminic compounds. By means of a punch card record system many associated facts were kept and analyzed, a procedure also used in the study of chlorcyclizine.[2] This standardized procedure proved valuable since it gave greater significance to the comparative findings. Although a record was kept of various grades of relief, in the final evaluation the patient was classified either as "helped" or "not helped," occasional or slight relief being classed in the latter group.

Doses.—Table I shows the doses of p-fluorobenzyl-DPE given to 238 patients on whom an evaluation was obtained. (In several patients more than one dose is recorded). It will be noted that with the 15 mg. dose sixteen out of sixteen patients were helped, and that with both the 30 and 50 mg. doses about 62 per cent were helped. This does not mean, of course, that 15 mg. doses are more effective than 30 mg. and 30 mg. are just as effective as 50 mg. It means that those who obtained poor results with 30 mg. doses did not try 15 mg. doses and that many of those who took 15 mg. without results but obtained benefit from larger doses failed to report the preliminary trials. The 50 mg. group contained patients who never tried 30 mg. Furthermore, the 50 mg. doses were generally prescribed in the more severe parts of the hay fever season where the effect was comparable to the smaller doses in the earlier and lighter portion of the season. The proportion of children taking the 50 mg. doses was not as large as in the adult group. Doses larger than 50 mg. were not administered, although an analysis of our findings indicates that a series of cases should be treated with larger doses.

Speed and Duration of Action.—In only a few patients could the speed and duration of action of the drug be studied. The usual difficulties of inconstancy of symptoms and lack of co-operation of the majority make such observations limited to a small number. It will be noted from Table II that seventeen patients thought their symptoms were benefited in one-half hour, thirteen in one hour and one in two hours. The vast majority of patients from whom opinions could be obtained thought that the effect of the drug lasted three to six hours, usually four. In this respect p-fluorobenzyl-DPE behaves like most drugs we have studied and is unlike chlorcyclizine which has prolonged action at least in a proportion of patients. In most patients the medication was administered for periods from several days to six weeks. Twenty-nine patients took the drug for periods ranging from one and one-half to several months, without any ill effects.

Seasonal Hay Fever.—A total of 165 hay fever patients taking this drug were observed (Table

TABLE III. HAY FEVER. RESULTS OF TREATMENT WITH P-FLUOROBENZYL-DPE

	Type of Hay Fever			Dose of Drug		
	Grass	Ragweed	Mold	15 mg.	30 mg.	50 mg.
Desensitized patients 85						
Not helped.....25	6	23	9	1	6	18
Helped 60	26	50	31	3	7	50
Non-desensitized patients 80						
Not helped.....28	3	25	9	0	11	17
Helped 52	7	49	27	4	21	27

TABLE IV. MISCELLANEOUS ALLERGIC MANIFESTATIONS. RESULTS OF TREATMENT WITH P-FLUOROBENZYL DPE

	Total	Not Helped	Helped
Perennial rhinitis	44	23	21
Asthma	48	44	4
Cough	11	4	7
Urticaria	11	6	5
Atopic dermatitis	10	5	5
Contact dermatitis	1	1	0
Pruritis ani	1	0	1
Other dermatitis	4	1	3
Allergic conjunctivitis	2	0	2
Corneal ulcers	1	0	1
Headache	3	1	2

III). Most of these were treated during 1949, although a few were seen in late 1948. Although the incidence of benefit from the drug is somewhat greater in the desensitized group than in the non-desensitized group this alone does not portray the real difference between the two categories. In the non-desensitized group many who were classed as "helped" were no longer helped when the season advanced. Furthermore, many more patients in the desensitized group were helped by an occasional dose of the drug while the non-desensitized patients usually required more continuous employment of medication. Not included in the table are many desensitized patients who did not require antihistamine medication. I have already pointed out the difficulties of interpretation of relative effects of different doses. Combining all figures in the hay fever group, 68 per cent were "helped."

Miscellaneous Allergic Manifestations.—It will be noted from Table IV that this drug behaves like most of the other antihistamines toward other allergic manifestations. Perennial vasomotor rhinitis, allergic cough, urticaria and atopic dermatitis are helped in approximately half of the instances. It is possible that larger doses might produce a greater incidence of benefit. Asthma is benefited rarely and never adequately for the relief of acute attacks.

TABLE V. SIDE EFFECTS FROM P-FLUOROBENZYL-DPE

	Children	Adults
15 mg.	0	1
Mild	0	1
Severe	0	0
30 mg.	2	12
Mild	1	5
Severe	1	7
50 mg.	2	27
Mild	0	19
Severe	2	8

Sedation	31	Nausea	1
Dizziness	4	Abdominal pain	2
Weakness	2	Dryness	2
Poor concentration	1	Dermatitis	1
Headache	1		

Side Effects.—(Table V). Undesirable symptoms were noted in forty-four patients (about 19 per cent). With the 50 mg. doses the incidence of side effects was 23.5 per cent, two-thirds of the latter being mild. The incidence and intensity of toxic effects are sufficiently low to encourage the use of larger doses in the next series in order to see whether the therapeutic results may not be materially improved. Sedation was again the most common complaint.

Comparison with other Antihistaminic Drugs.—In 115 of the patients of this series other potent drugs were given to allow a comparison to be made. Generally speaking several drugs were tried before any comparison was attempted. In a few instances comparisons were only possible with pyribenzamine. No direct individual comparisons were made if the patient took a new drug only (such as chlorcyclizine) in addition to the fluorobenzyl compound. In this group thirty-eight felt that the results were about the same (good or bad) as with other antihistamines. In twenty-two the results were less than that obtained with other compounds, and in fifty-five they were better. It should be added that many patients not in this group of 115, who obtained good results with this drug, were loath to try any other drugs, and thus the size of the potential "better" group might have been larger than what is listed here.

Comment

Much of the animal work and the histamine flare inhibition indicate that p-fluorobenzyl-DPE is a compound of considerably greater potency than most other antihistamines. The results of clinical therapy appear to indicate that it is as potent and perhaps more potent than pyribenzamine. Difficulties in clinical comparison are legion. For example, in hay fever patients the incidence of good results

obtained several years ago with pyribenzamine cannot be properly compared with the results obtained in this season with this compound. The 1949 mold and ragweed seasons were considerably more severe than those in the last several years. Furthermore, our own attitude toward the usefulness of this type of drug has been modified. In the past, patients who obtained slight or occasional relief had been included in the "improved" group; now we feel that unless the drug is fairly consistently helpful and in worthwhile degree, it should not be regarded as a success.

Since 50 mg. doses produced no more side effects than similar doses of pyribenzamine the next logical step is to try 100 or 150 mg. doses in clinical therapy. In this way it should be possible to decide whether this drug has any distinct advantage over its non-halogenated precursor.

It may be mentioned here that during the ragweed season of 1949 a limited number of tablets of the chlor analogue of pyribenzamine was furnished to us for therapeutic and experimental trial. The laboratory assay indicated that it is a potent antihistamine, possibly more potent than pyribenzamine. However, since gastrointestinal complaints were present in the first eight patients to whom 50 mg. doses were given, its therapeutic trial was at least temporarily discontinued.

Summary

1. Experimental and clinical results are reported for N,N-methyl-N'-(4-fluorobenzyl) N'-(2-pyridyl) ethylenediamine hydrochloride, which had been previously selected by the snythesizing laboratory as the most promising of a series of halogenated tripelennamines.

2. In most types of animal experiments, and depending on the nature of the procedure, the indicated potency of this compound was one to four times that of tripelennamine (pyribenzamine).

3. By local application to the skin and by oral administration, this drug displayed about twice the potency of pyribenzamine, as measured by its ability to inhibit the histamine flare on human skin.

4. The compound was as effective as pyribenzamine in the relief of allergic manifestations. The impression gained thus far is that some patients who required 50 mg. doses of pyribenzamine obtained similar benefit from 30 mg. doses of this drug.

5. It is difficult to determine by the evidence at hand whether and how much more potent this fluorobenzyl drug is compared with pyribenzamine. More direct comparisons will have to be made in a series of patients each of whom takes varying doses of this drug and pyribenzamine.

6. Side actions compare favorably with most antihistaminic drugs.

7. Further evidence is presented that this drug behaves like other antihistaminic drugs in its inability to substitute for the more effective and more lasting benefits obtained from desensitizing injections.

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MSMS

EXECUTIVE COMMITTEE OF THE COUNCIL

(Continued from Page 398)

Department will be displayed for the first time at the Michigan Postgraduate Clinical Institute in Detroit March 8-9-10.

- Committee reports were presented from the Mediation Committee, meeting of Jan. 22; Special Committee on Education, meeting of Jan. 22; Special Committee on Mental and Social Problems, meetings of January 25 and February 4; Special Committee to Study Councilor Districts, meeting of January 26; Arrangements Committee for Fourth Michigan Rural Health Conference, meeting of January 30; Permanent Conference Committee, meeting of February 1; Rheumatic Fever Control Committee, meeting of February 1.
- Report on examination of feeble-minded children: This report, drafted by Carleton Dean, M.D., MSMS representative to the Committee of the Department of Public Instruction on this subject, was approved by the Executive Committee of The Council and authorized to be sent to Dr. Lee M. Thurston, Superintendent of Public Instruction.

Primary Inflammatory and Ischemic Disease of the Appendices Epiploicae

By Thomas Wilensky, M.D.
Lansing, Michigan

ALTHOUGH Wayne Babcock's case, reported by Fiske, remains the solitary instance of preoperative diagnosis of primary epiploic appendicitis, the disease is not rare. This infrequently considered pathologic condition is surgically significant because its symptomatology is clinically indistinguishable from the manifestations of other intra-abdominal lesions. In the fifty-two cases reported up to 1940, there were six deaths, in four of which death was attributed to complications arising from the diseased epiploic appendix. It is more than likely that many instances of primary idiopathic, ischemic or inflammatory disease of the epiploic appendages are missed at surgery because of the inability of the surgeon to carry out thorough exploration of the abdomen through a small and inconveniently located incision. It is true also that the clinical course of such missed cases is for the most part benign. Exceptions to this rule include acute inflammatory epiploic appendicitis on the basis of a perforated or ulcerated intestinal diverticulum with penetration into the fat-filled peritoneal sac constituting the appendage. Acute suppurative processes of unknown origin with or without abscess formation are likely to present unequivocal indications for surgical intervention.

Etiology

The causation of primary disease of the epiploic appendages has been the subject of much speculation by the numerous authors who have studied this subject. A compromised or strangulated blood supply produced by torsion of the pedicle has continued to be regarded as the primary producing force, although an actual twist has been demonstrable at operation only occasionally. Infarction and gangrene in the absence of demonstrable torsion have been explained by the loss of blood supply through degenerative vascular processes resulting from trauma or by engorgement with thrombosis induced through anatomical disproportion of the arterial and venous blood supplies to the individual appendages. Most acceptable to date is the hypothesis offered by Payr that since the appendiceal veins are longer than the corresponding arteries, the former might become twisted around the latter with the production of gangrene based on venous occlusion. Conditions favorable to the inauguration and progression of this train of events are promoted by the physiologic splanchnic plethora with its characteristic mesenteric venous engorgement during the process of digestion. During this phase the distal dependent portion of the epiploic appendage is heavier and contains more fat and venous blood than does the proximal portion. Such circumstances, it is stated, contribute significantly to local changes consisting of trauma by stretching of the delicate venous wall, followed by local thrombosis and infarction. In the absence of secondary infection, aseptic gangrene is the outcome of appendiceal torsion or primary thrombosis of the epiploic vessels. After organization of the devascularized tissue takes place it may separate at the line of demarcation and pass off into the general peritoneal cavity as a loose body. Virchow in 1863, and more recently Klingenstein, Hunt and others have called attention to these intra-peritoneal loose bodies and have discussed their origination from the appendices epiploicae. An explanation for primary inflammatory disease in the epiploic appendages with or without frank suppuration and in the absence of torsion has not been forthcoming. The answer to this problem may lie in Gilchrist's and David's demonstration of lymph nodes in the appendices epiploicae while studying cleared surgical specimens of rectal and sigmoidal malignancy. The lymph nodes isolated by them measured from 1 to 4 millimeters in diameter and were located in any portion of the appendage. Metastatic carcinoma was found by these authors in the epiploic appendiceal lymph nodes in five specimens. Gilchrist's and David's researches indicated that the morphology of the appendices epiploicae, whether long and slender or broad and relatively massive, had nothing to do with the presence or absence of lymph nodes. This observation harmonizes well with the reports of previous authors who stated, while contending that torsion was the commonest precipitating cause of acute epiploic appendiceal lesions, that it made little difference whether the appendages were short and firm or long and unusually flexible. It would appear that the presence of lymph node structures within the substance of the epiploic

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appendages should bear more than an accidental relationship to the presence of inflammatory disease within those structures.

Anatomic and Physiologic Comments

The appendices epiploicae are rudimentary in children, although their appearance in the fifth month of fetal life has been demonstrated. There is no agreement concerning the physiological usefulness of these fatty appendages. Robinson concluded that they were functionally active in the removal of fluid from the large bowel. At the present time the most commonly accepted opinion regards them as miniature omenta acting as protective and defensive agents against injury. Pines injected the colic blood vessels and was able to trace the smaller branches to their terminations. He noted that unlike the vasa recti of the small intestine which enter the bowel wall directly at the mesenteric border the vessels to the large bowel divide at the mesenteric border within the peritoneal fat and encircle the bowel subperitoneally, giving off small branches to the wall. In so doing they carry along a layer of protective subserous fat which is directly continuous with the fat in the mesentery. The main vessels continue into the fat of the appendices epiploicae where they generally describe an inverted U-shaped arch from which terminal branches run into the intestinal wall and into the epiploic fat sac. From this it has been concluded that the appendices epiploicae are merely protective fat pockets for the redundant intestinal vessels when the intestinal wall is collapsed. This safety mechanism of vascular redundancy is obviously necessary to prevent compression of the vessels and obliteration of their lumens when the bowel is distended.

Clinical Features

Prevalence of the disease among well-nourished and obese persons is significant and at once suggests a causal relation. Mabrey's collected report of fifty-two cases was made up of twenty-nine men and twenty-three women. The ages varied from twenty to seventy, the average being thirty-five. The most common lesion involving these appendages was twisting of the pedicle with resultant infarction. The location of the diseased appendage was roughly twice as common in the sigmoidal appendances as it was in the cecal or right-sided structures. Scattered single cases were found elsewhere along the colon. The listed preoperative diagnoses represented a rather complete consideration of all intra-peritoneal disease processes. Surgical neglect of acute appendicitis, commonest of all surgical emergencies, is an invitation to serious consequences. Because this is generally recognized today it is not surprising that the presence of an appendectomy scar effectively smothers the alarm reaction that should be provoked whenever acute abdominal symptoms indistinguishable from those of appendicitis are encountered. Diverticulitis whether solitary in the cecum or right side of the colon or sigmoidal in location is deserving of brief but emphatic mention here. Like disease of the epiploic appendages it is not as rare as was once thought, although failure of recognition during surgery is not uncommon. Because it is commonly overlaid by an indurated fat pad into which it has burrowed, a diagnosis of epiploic appendicitis may readily be made, with failure to recognize the important underlying acutely inflamed pathogen-laden intestinal out-pouching. It is not necessary to elaborate upon the observation that the unrecognized cutting across of a diverticular sac is a serious technical error.

The absence of a characteristic symptom complex of primary disease of the epiploic appendages is obvious. The most constant feature is abdominal pain of a sharp or cramping nature which varies in location according to the situation of the diseased appendage. Unmistakable local tenderness is the most common finding whereas abdominal rigidity is usually absent because an inflammatory and/or suppurative process is not usual. Hyperesthesia of the skin has been reported as an outstanding symptom in this disease. Pines and Rabinovitch reported a similar finding of marked cutaneous hyperesthesia in cases of infarction involving the large omentum.

Case Report

C. S., a man, aged thirty-four, was seen in the Edward W. Sparrow Hospital on May 11, 1949. He stated that he had been entirely well until early in the morning of May 8, at which time he had first experienced crampy lower mid-abdominal distress. He had defecated frequently with relief of short duration after each small bowel passage. He was not nauseated but had experienced loss of appetite on the day of admission. Several enemas had assisted in the evacuation of quantities of gas with brief relief periods. In response to direct interrogation he stated that the full urinary bladder seemed to increase the sensation of intra-abdominal distress in turn relieved by voiding. He denied chills and fever and had not experienced the combination of painful cramps

and audible borborygmus. Appendectomy through a short, vertical, well-healed, laterally placed, right rectus incision had been done in 1938. He had seen service in Africa and elsewhere with the armed forces but denied intestinal or diarrheal disturbances. Examination of this unusually large, well-built, overweight state police trooper localized all positive findings to the abdomen. Deep right lower quadrant tenderness was present under the appendectomy scar. Deep palpation in this region seemed to facilitate the passage of gas out of the right lower quadrant which the patient experienced subjectively as a distinct movement providing relief. There was no peritoneal reaction and muscle spasm was minimal. Pressure in the right lower abdominal quadrant produced tenderness which radiated diagonally across the abdomen toward the left upper abdominal quadrant. Pressure in the deep lower left quadrant evoked a radiating distress toward the right groin. Rectal digital examination was negative. Temperature, pulse, respirations, blood pressure and urinalysis were entirely normal. A blood count was normal with 9,000 leukocytes, 71 per cent of which were polymorphonuclears. A flat film of the abdomen revealed no gas-filled bowel loops. On the third hospital day a barium enema examination was carried out. The cecum was found to be in a somewhat high position and filled incompletely. The descending colon and pelvic loops were virtually not visualized due to total and rapid emptying of that portion of the bowel. An upper gastrointestinal roentgenological examination was then conducted, with the major finding of narrowing of the distal portion of the duodenal bulb consistent with adhesions or superficial contractions or spasm. On the third hospital day he stated that he felt better but had been afraid to eat anything for the past several days. Deep right lower abdominal tenderness was still present and pressure here again evoked a radiating distress diagonally across the upper abdomen toward the left subcostal region. It was felt that an adhesive fixation in the ileocecal region, not causing obstruction but interfering significantly with motility of the parts, was the most likely diagnosis. He was placed on a baby soft diet as a therapeutic test. The ingestion of this food caused him to have a recurrence of the lower abdominal crampy distress which was his original complaint. Operation was advised and accepted.

Operation.—Under pontocaine spinal anesthesia supplemented with intravenous sodium pentothal, the abdomen was opened through a relatively short primary right lower quadrant vertical paramedian incision. The right extremity of the great omentum was fused to the peritoneum under the appendectomy scar. These adhesions were released by sharp dissection permitting the withdrawal of the omentum from the abdomen. Exploration now disclosed that the terminal ileum was angulated and fixed by broad peritoneal attachments to the posterior wall of the pelvis. Manual exploration throughout the abdomen disclosed the presence of a hard roughened fixed mass deep in the left side of the pelvis. The laparotomy incision was extended downwards, and under direct vision this mass was recognized as an epiploic appendage on the medial wall of the sigmoid loop of colon involved in an acute inflammatory state with patchy gangrenous discoloration. Digital dissection found a cleavage plane and the appendage was excised over a fine chromic catgut hemostatic stitch. The terminal ileum was released by cutting its avascular peritoneal fixing bands. The denuded areas were peritonealized. The abdomen was closed without drainage utilizing interrupted stainless steel sutures, No. 32, in the anterior rectus fascia.

Pathologic Examination.—Examination was done by Dr. Charles E. Black. Specimen consists of an epiploic appendage measuring 4 by 2 by 2 centimeters. Hemorrhagic areas are found throughout. *Microscopic examination:* Sections of the mass of the epiploic appendage show masses of young granulation tissue located immediately beneath the peritoneal surface. Peritoneal adhesions are found consisting of young granulation tissue. Intense congestion of the venules in the fatty stroma. Generalized perivascular hemorrhages. *Diagnosis:* Acute suppurative inflammation of the epiploic appendage with organization. Localized acute suppurative peritonitis with organization. No evidence of tuberculosis or neoplasm.

The postoperative recovery was quite uneventful and he was discharged on the fifth postoperative day.

Summary

1. A case of acute suppurative inflammation of a sigmoidal epiploic appendage has been reported.

2. The presence of lymph nodes in the appendices epiploicae has been pointed out and their significance in the development of primary inflammatory epiploic appendiceal disease suggested.

3. Primary disease of the appendices epiploicae has been established as a serious intra-abdominal disease that is not rare.

4. The necessity for clinical consideration and surgical recognition of this condition has been emphasized.

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Good Public Relations

From Every Level

A little introspection will convince almost anyone that, since time immemorial, wherever there has existed a sociological grouping, a business, or a public institution, the element of public relations has been of prime importance. Yet large-scale organized public relations activity, with the exception of politics, is virtually an "invention" of the twentieth century. National publications and radio have made public relations big business today. But it has required a governmentally financed attack on fundamental concepts of medical practice to awaken the Medical Profession to both possibilities and necessity for affirmative participation in the field.

Our need for sound public relations is too evident today to admit controversy, and only adequate utilization of possibilities remains. The cover dedication of this issue of THE JOURNAL, and this page, are a gesture from your professional organization to you. It is for you as practicing doctors of medicine to extend influence, by conduct and by persuasion, to the general public which is our final concern. You employ, through your state and national societies, a handful of trained public relations representatives. While quite necessary in its proper sphere, their work alone is not enough. Good public relations efforts must emanate from every organizational and individual level. The county societies must establish and maintain sympathetic contacts with local news agencies and civic organizations. At the individual level, conduct in genuine accord with medical ethical standards may well be as important as persuasion, but the persuasive element cannot be forgotten for this reason. It is this individual-level persuasion, quite simple in theory because it resembles effecting control of a disease communicable only on direct contact, and most important because it reaches the greatest number of the public, that is so difficult of attainment.

A full public relations effort at the individual, and each county, state and national Society level, is the very minimum that we can afford. Let us at least be sure that a medically sound pattern for remedying medical ills does not fail for lack of an adequate hearing.

W. E. Barstow M.D.

President, Michigan State Medical Society

President's

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Editorial

SOCIALISM PROGRESSING

THE PRESIDENT has announced his determination to make a "non-political" tour of certain parts of the United States during the coming months before election. He has picked out five or six states with strong Republican majorities (including Michigan), and has announced that he will campaign for National Health Insurance. Again an emergency has arisen. "About 30 per cent of our people cannot afford to pay for their own health services," and it therefore is necessary for the Government to take over this function for ALL people in order to preserve the health of the people! That is the argument from the Federal Security Agency; but while making this observation the Agency reports that the death rate for the United States in 1948 was the lowest in the history of the country. Also, since 1935 the percentage of total births delivered in hospitals has more than doubled, being 84.8% as of 1947. Maternal mortality has decreased to a new low. "In fact, the general health conditions in the United States are excellent, and are still improving." This gives the bureaucrats a logical (?) reason for changing the program of health service.

The Government now is responsible for an unknown number of our people, variously estimated from 20 to 30 million, who receive complete health service, and the Government is having difficulty getting more doctors on its various hospital staffs. If the National Health Service Program were adopted, the number of doctors available would be so inadequate that even Ewing estimates it would take twenty years to get the program operating. More doctors cannot be created by passing a law! They need many years of education and training.

James F. Byrnes, former Associate Justice of the Supreme Court, former Secretary of State, in a recent article in *Colliers' Magazine* (March 4), says:

"If the Politicians will let the doctors alone, the Government will be able to continue its boasts about improving health conditions."

COERCED

PRESIDENT TRUMAN'S Reorganization Plan No. 1 was opposed, and its defeat was accomplished in part by concerted and almost universal objection from the health professions who feared the result of being placed under the domination of the Social Security Administrator. Whether these professional people are to be credited with the outcome or not, the avalanche of investigations of medical societies, medical service corporations and groups could scarcely have been a coincidence.

The Department of Internal Revenue certainly should have no connection with the effort to socialize the country, or even a small part of it, the medical profession. It seems, however, that the department is making undue efforts to find discrediting information about doctors. We have heard of an inspector who questioned the church contributions claimed, went to the pastor and demanded to see the contribution envelopes, only allowing what they showed. It is told that inspectors have gone to the hospitals and secured lists of doctors' patients, then have contacted those patients getting from them records of their payments to their doctors for comparison with his reports.

We have long believed that the department ruling prohibiting the claim for costs of post-graduate study as a deductible charge is entirely unfair. The latest affront is a new order given to the reporter for Washington Report on the Medical Sciences: "(1) AMA members who paid the $25 assessment in 1949 should not deduct the sum, either as a business expense or under any other heading, in making out their tax returns; (2) the question whether the payment of AMA dues constitutes a deductible item is undecided." If dues are not deductible in the case of the AMA, how soon will the same rule be applied to all professional societies? And how soon to other legitimate expenses?

Another coincidence: A young doctor, taking his hospital training for his specialty board, wrote to Mr. Ewing drawing attention to Ewing's reportedly having made a competence in the private practice of law, and asked why he be denied the

same privilege of making a living in the private practice of his chosen profession. Promptly (by coincidence?) this young doctor was visited by the narcotics inspectors and asked for his complete records of narcotics used or on hand. Next, he received a visit from the Internal Revenue agents who went over his financial records. This is not an isolated case.

When the Department of Justice a few years ago found they could not cope with notorious gangsters, charges were made of violating the income tax laws, and these gangsters were prosecuted and convicted. Has the medical profession become so resistive to the efforts to accomplish socialization that the other branches of the government must be called upon for the final coup d'état? Are the doctors of medicine to be treated like the Capone era offenders?

ELECTIONS

ONE OF THE great privileges of the American individual is that of voting for and electing his government officials. If we, as individuals, have any choice or desires in the way our government is operated, we must exercise our election franchise. Most of us remember the sad story at the national election two years ago when an administration whom everybody thought was on the way out was re-elected, and the excuse given was that about three or four million Republicans failed to vote. The Executive Secretary of the Ohio State Medical Society, having in mind the fact that votes are all that count in elections, made a survey in an industrial area in Ohio, Summit County, including the City of Akron, and came up with these astounding figures.

"18 per cent of the physicians of the county did not vote in the 1948 election—13 per cent of them were not even registered and therefore not eligible to vote.

"22 per cent of the wives of physicians did not vote—16 per cent of them were not registered.

"10 per cent of the members of the Rotary Club did not vote—3 per cent were not registered.

"The tally on Kiwanis Club members was about the same.

"18 per cent of the druggists did not vote—15 per cent were not registered.

"11 per cent of the teachers did not vote—6 per cent were not registered.

"32 per cent of the bank employes, including executives, did not vote—26 per cent were not registered.

"33 per cent of the ministers did not vote—26 per cent were not registered.

"34 per cent of the retail grocers did not vote—29 per cent were not registered.

"Here's one for the books: 21 per cent of the members of the Chamber of Commerce did not vote—15 per cent were not registered."

Do we need to say anything more regarding elections? We sometimes get what we deserve. If we are among the percentage who did not vote, we have no rightful complaint!

WAR VETERANS PROVE GOOD CREDIT RISKS

More than 1,500,000 veterans of World War II have made use of the Veterans Administration home loan plan to purchase new residences costing more than $8,500,000,000, and 70,000 of these already have paid off their loans in full, the National Association of Home Builders reports.

The Association said VA records showed that only eighteen out of every 1,000 ex-GI home buyers were behind in their monthly payments, and explained that most of those who have been in arrears in the past have managed to catch up on their payments. Default claims thus far have been paid on only three out of every 1,000 loans.—The American Banker.

MOTION PICTURE—A PUBLIC RELATIONS MEDIUM

(Continued from Page 393)

taining the library but investigation shows that these films have proven valuable aides in educational programs. The Michigan State Medical Society is offering the two MSMS productions to other state medical societies at costs proportionate to the number of theater patrons. The theater attendance figures used are the same as those which govern charges of the standard film distribution agencies. Full rights to all showings and credit for the film are given to the state medical society purchasing the film.

The film "Lucky Junior" is now available for showing by or before any group in Michigan on 16mm. film. It may be obtained by writing to the MSMS, Executive Office, 2020 Olds Tower, Lansing, Michigan. It is being used by other states in their theater circuits. The second film, "To Your Health" is now appearing in Michigan theaters and upon its completion of 400 theaters will be made available on 16mm.

An extensive film library available to the medical profession is maintained by the American Medical Association. Requests for AMA film listings should be addressed to the: Committee on Medical Motion Pictures, American Medical Association, 535 North Dearborn Street, Chicago 10, Illinois.

Public Relations and Michigan Medicine

Every action has its resultant wave of effect just as a drop of water in a pool sends out its ripples that continue far distant from their source.

Perhaps you will recall the "consumer movement" in America during the 1930's. It was based on a public disillusionment resulting from a great depression. The most popular indoor sport at the time seems to have been writing pamphlets explaining how you, a buyer of merchandise, frequently were cheated through misrepresentations, notably in advertising. American business became alarmed at the prospect of restrictive laws if this avalanche of exaggerated attacks remained unchecked.

Repercussions of the "consumer movement" are still being felt but their intensity has fallen to a low murmur.

The present movement toward socialized medicine is a strong corollary of the "consumers movement."

Arising out of a great war disturbance has come a public questioning its own health and its purveyors of health care. Again the Society-of-Opportunists-for-Socialism spread their propaganda representing that your own and your neighbors' health are in a bad way due to an antiquated system of medical and health care. The medical profession is alarmed at the prospect of hampering legislation unless the flood of wild half truths and gross exaggerations are slowed.

Just as the businessman of the 30's was aggrieved at the unjust assault upon his integrity so is the doctor of the 50's.

The question before doctors is: In 1970 will a doctor, still free of galling government controls, be able to say, "yes we still feel the repercussions of that attack but their intensity has fallen to a low murmur"?

Very possibly the answer to the doctors' problem lies in the acquisition of the same knowledge as did the businessman's—a knowledge of the practice and policies of good public relations.

Let us carry the corollary further.

When the rash of muck-raking set in on business, here is what was done. Businessmen learned how to end their silence and tell the truth in terms the public would accept. Secrecy had caused suspicion and telling the truth created confidence. Those policies which proved to be public irritants were detected and changes made. The areas of agreement between business and the public were found and used to build good will and progress.

Business has come a long way in Public Relations: Medicine has a long way to go.

The Public Relations problem facing medicine today is twofold in nature. The most immediate problem is to convince the people of the truth that greatest health for them can be gained and kept under the voluntary American system of health protection and care rather than under a compulsory socialized plan. The second objective is to create and maintain public confidence in the medical profession as one of the most friendly, effective, available and economical bulwarks against the hazards of illness.

The first problem is one of pressing urgency. The spotlight of public attention has ripped aside any privacy in which doctors have labored. And because the spotlight is manned by those who seek flaws, its focusing emphasizes the weak spots.

The answer is not to attempt to dim the spotlight nor to cover the errors. Such action merely challenges the imagination of the public. Instead the way to eliminate the spotlight's effect is to floodlight the entire scene and to sincerely and obviously rectify any weaknesses that exist.

That is protection but it is not enough. In addition we must also truthfully floodlight the socializers' proposals so that the people may compare. Comparison proves!

We are doing these things in Michigan.

It has been a policy of the Michigan State Medical Society to seek out the shortcomings of the medical services and health protections in Michigan *and then do something about them.* Witness the surveys, the "twenty-seven Michigan Firsts," the surge of sustained well-organized health activity that is second to none. Total the results and you have a *complete pattern of voluntary functioning medical and health services.*

There are flaws—yes! There are gaps in complete, perfect service to all persons—yes! Utopia has not been reached—and it won't be. But there is in Michigan's pattern, a project or plan in being, activated and supported, to meet every major need that exists. Progress *toward* the ultimate is being made.

When will the task be completed? Never. But a measure of success will be gained when it is understood that the task cannot be completed. The floodlights of information have been turned on, and they must remain on, for the public is not a static captive audience; rather, it is a constantly changing parade. Interestingly enough you can turn Public Relations activity on—but you can't turn it off. Every action has its resultant wave of effect just as a drop of water in a pool sends out its ripples that continue far distant from their source. As long as there is any action, there will be public relations effects—the only question is whether those effects are good or bad. The action's effects can be increased in intensity but they can't be stopped.

With traditional reticence the Michigan State Medical Society has felt its way cautiously into the Public Relations field. It has not dramatized sufficiently the great progress of medicine. Yet, even so, it has been far more advanced in this respect than has the great majority of other medical organizations.

Much has been done. By the judicious use of all likely communication media a program of public education has reached millions of persons in Michigan. Cooperation has been gained with special publics and other professions. The truth is being told, irritants eliminated, and a great ground swell is arising against socialism and socialized medicine in the United States.

This phase will pass. The question of socialized medicine will become resolved. We will either have it in toto—a major portion of it—or the present system will remain in effect. In any case socialized medicine as an entity in itself must sooner or later become a theoretical question rather than a practical issue.

Regardless of the outcome of the present struggle to keep medicine free of government compulsions, responsibility for good public relations will still rest upon the medical profession. Every phase of medicine is directly tied to public relations. The service of any doctor is increased or decreased in proportion to the confidence of a "public" in him —be that public but a single person or a nation.

Consequently, the second objective—to create and maintain public confidence in the medical profession as one of the most friendly, effective, available and economical bulwarks against the hazards of illness—is of major importance to every practitioner of medicine.

The first line of action in this respect is the development by every doctor of an attitude toward the public that is acceptable to the public.

That attitude, activated, becomes policy that can only result in high public service. As the Public Relations Committee continues its program of public enlightenment it will undoubtedly continue also to serve as a mirror to the medical profession of what the public thinks of doctors and what it wants from them. Only by doing so will it exercise its true function.

Below is a short subjective outline of the Public Relations Program of the Michigan State Medical Society:

SHORT RANGE PUBLIC RELATIONS PROGRAM

(A campaign based on the idea of furthering the basic Public Relations Program but with the immediate objective of halting socialism)

1. "Co-operation with the American people" campaign
2. Use of communication media for public education

LONG RANGE PUBLIC RELATIONS PROGRAM

(A planned continuing effort based on sound public relations practice and high public service)

1. Measurement of public opinion and medical services rendered
   (a) Self-scrutiny
   (b) Surveys
2. Active cooperation with all legitimate health agencies
   (a) Private
   (b) Governmental
3. Active cooperation with all publics interested in health
   (a) Michigan Health Council and Community Health Councils
   (b) Michigan Rural Health Conference and Co-sponsors
   (c) Michigan Industrial Health Conference
   (d) Other organizations
4. Support to general health programs
   (a) Immunization
   (b) Disease control
   (c) Diagnostic and consultation programs
   (d) Other methods
5. Public informational program
   (a) Communication media
   (b) Educational institutions
6. Intra-organizational advancement
   (a) Progressive activity
   (b) Continuing education
   (c) Code of ethics
   (d) Mediation Boards

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

Michigan needs at least 360 more public health nurses to meet recommended minimum standards of one public health nurse for each 5,000 people.

The state now has an average of one public health nurse to serve 7,000 people but the distribution is very uneven. Five counties in the state have no full-time nurses employed by any agency for public health work and two other counties have no county-wide service. In a few areas of the state, there is one public health nurse for each 3,000 to 4,000 people, but in others there is one nurse for 20,000 to 40,000 people.

On January 1, 1950, there were 879 full-time nurses employed by all types of agencies for public health work in Michigan. This was an increase of 23 over the previous year, and the largest number of any year since 1943 when there were 889 public health nurses employed in the state.

Public health agencies have not yet found it possible to make up for loss of nurses during the war. In January, 1940, there were 994 public health nurses in Michigan; in 1941 there were 976; and in 1942 there were 974. Budgeted positions have increased while applicants have decreased. There were about 40 unfilled nursing positions in county and district health departments at all times during 1949.

The percentage of nurses employed for public health work who have completed at least a year of approved study in public health nursing has declined slightly since 1941. Nurses with a year of public health training comprised 53 per cent of the total in 1941; about 52 per cent in 1949 and 51 per cent in 1950. The percentage of those with no public health training has doubled since 1941—from 11 per cent to 22 per cent.

The Section of Nursing, the Michigan Nursing Center Association and other professional nursing groups in the state are carrying on programs of recruiting and training designed to improve Michigan's public health nurse situation.

* * *

The California Department of Health has reprinted in the February 15 issue of its bulletin *California's Health*, the article on "The Hillsdale Plan in Action" by Arthur Strom, M.D., of Hillsdale, Michigan, which appeared in the November issue of *Michigan Public Health*. As a result of the reprinting the California State Department of Public Health has received many requests for help in instituting this plan in local communities in California. Previously copies of the Michigan publication had been requested by the California Department for its state leaders in the movement for cancer control.

* * *

Vergil Slee, M.D., Director of the Barry County Health Department and Secretary of the Michigan Health Officers Association, has been named program chairman for the 30th annual Michigan Public Health Conference to be held in Grand Rapids November 29 to December 1.

Hugh Robins, M.D., has been named representative of the Michigan Public Health Association on the Governing Council of the American Public Health Association.

* * *

In an effort to meet the rapidly increasing demands from local communities for assistance in hearing conservation programs, the Department has employed two hearing technicians on a temporary basis. They are Donald Markle, who recently received a Master's Degree from Wayne University, and Geraldine Purcell, who was recently graduated from Michigan State College.

* * *

The discovery in infant diarrhea outbreaks in southern England of unusual *coli* 0-111 organisms, the type isolated in Michigan's recent outbreaks, brought to the Michigan Department of Health, Dr. Joan Taylor, infant diarrhea expert of England's National Salmonella Center.

Dr. Taylor, one of the discoverers of the organism in the English outbreaks, came here to confer with Dr. William Ferguson, Coordinating Bacteriologist of the Department who isolated the organism in Michigan. Dr. Taylor also studied the Salmonella laboratories of the Department.

* * *

Conclusive evidence on the effect of fluoridation of municipal water supplies in the prevention of dental caries will be available in about two years time from a study which is being made of the dental health of children in Grand Rapids, which has fluoridated its water supply, and Muskegon, a control city. The first of two 1950 saliva checks of children in the two cities was recently completed by the Section of Dentistry, the University of Michigan and the National Institute for Dental Health. The study has been under way for the past five years.

* * *

The Michigan Department of Health Laboratories has received a request from Queen's University, Kingston, Ontario, for detailed information on how this department tests water supplies for nitrate contamination which might cause methemoglobinemia in infants.

* * *

The new birth certificates require for the first time, the name of the informant.

The Michigan Department of Health requests that each physician makes sure that this item is included on each birth certificate. Because this is the first time the information has been required, it is being overlooked in some cases.

* * *

National Mental Health Week is being observed in Michigan April 23 to 29 under the sponsorship of the

(Continued on Page 468)

Extensive mucosal destruction and ulceration from chronic ulcerative colitis with only a few inflammatory polyps.

ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

SEARLE

IN COLITIS MANAGEMENT—In the constipation of spastic, atonic and even ulcerative colitis, the smoothage action of METAMUCIL is of proved value.

METAMUCIL® provides a bland, soft bulk with a tendency to incorporate irritating particles with the fecal residue and is thus a valuable adjunct in correcting the constipation and minimizing irritation of the inflamed mucosa. METAMUCIL is the highly refined mucilloid of a seed of the psyllium group, Plantago ovata (50%), combined with dextrose (50%).

New: highly-soluble riboflavin

injection solution

HYFLAVIN (ENDO)

(methylol riboflavin)

The development of this new highly-soluble riboflavin compound permits the preparation of a concentrated solution without requiring the use of undesirable solvents. Hyflavin injection is ready for immediate administration by withdrawal directly into the syringe. This obviates the inconvenience of preparing a riboflavin injection solution from the dry powder. Hyflavin is used where rapid replacement of riboflavin is indicated or where there is interference with its intake, absorption or utilization.

Supplied: 10 mg. riboflavin per cc., 1 cc. ampules and 10 cc. multiple-dose vials.

THE G. A. INGRAM COMPANY

4444 Woodward Avenue, Detroit 1, Michigan

(Continued from Page 466)

Michigan Society for Mental Health with the co-operation of the Michigan Department of Mental Health.

Theme for the week is "Mental Health is the Key to Effective Living. There is Something Everyone Can Do About Mental Health." The objective of the week is chiefly educational. Two pamphlets, "For Mental Health" and "The National Mental Health Act and Your Community," prepared for lay people are available without charge from the National Institute of Mental Health, 1100 Chester Avenue, Cleveland 14, Ohio.

* * *

Hulda Stettler, a nutrition consultant with the Michigan Department of Health for the past six years, resigned effective March 10 to return to her native state, Wisconsin. Miss Stettler provided nutrition consultant services to local health departments, institutions, schools, welfare and other agencies in the western part of the state.

* * *

Two new film strips of interest to physicians have been added to the Film Loan Library of the Michigan Department of Health.

"Enemy in our Midst" is a fifteen-minute sound, 35 mm. film strip released by the Zurich Accident Insurance Company, which deals with cancer, the importance of early diagnosis and treatment and the advisability of periodic physical examination, for adult groups.

"Internal Triangle" is a 50-frame silent, color 35 mm. film strip released by the National Film Board of Canada which deals with basic foods in the three daily meals for all age groups.

* * *

The Michigan Department of Health gives a fifteen-minute broadcast on subjects related to public health over radio station WKAR, East Lansing, at 10:30 a.m. Tuesdays.

* * *

David Winterstein, formerly with Ingham County Sanatorium, joined the Department March 1 as an x-ray technician with the mobile units of the Division of Tuberculosis and Venereal Disease Control.

* * *

The Commissioner's Conference of Michigan's directors of local full-time health departments resulted in fifty-four recommendations to the State Health Commissioner pertaining to various phases of public health activities in the state.

These recommendations, approved by the forty-ninth health officers who participated in the conference called by the Commissioner, are being given consideration and wherever feasible and practicable, are being incorporated in the planning of the public health program of the state.

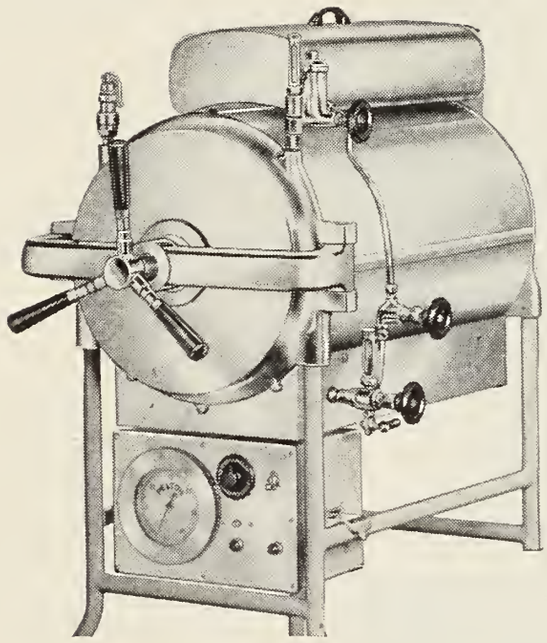
* * *

Visitors from seven foreign countries observed or studied in the Michigan Department of Health during February.

They included Juan Moroder, M.D., Director of the School of Public Health, Santa Fe, Argentina; Chryssa

(Continued on Page 470)

1900 • PELTON'S GOLDEN JUBILEE • 1950



SIMPLICITY OF INSTALLATION . . .
EASE OF OPERATION
are two of the outstanding features of this large

Pelton Self-Contained Autoclave

Eliminating the need for costly installation, this unit, finished in lustrous chrome and embracing the latest developments for automatic operation, provides ample capacity for multiple offices, clinics and small hospitals. Inside chamber dimensions: 12″ by 22″; overall, 33″ deep, 20″ wide, 60″ high on tubular stand. Operates on 220 AC.

Ask your dealer now for details of Pelton LV Autoclave, or write for literature.

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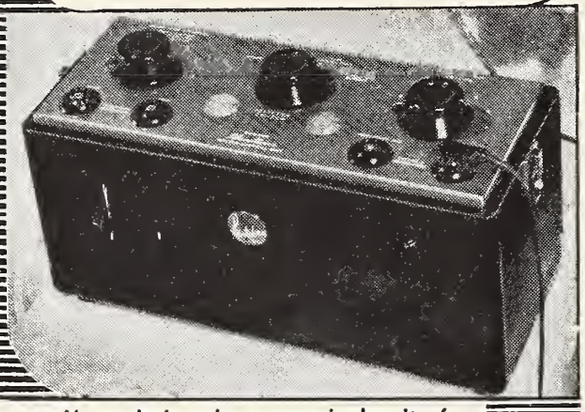
Electrosurgical Unit

. . . a MODERN LOW-COST SURGICAL UNIT for all minor and various major surgery.

The Birtcher BLENDTOME is a surprisingly practical unit for office surgery. With this lightweight unit, you have *all* the electrosurgical procedures of major units—electro excision, desiccation, fulguration and coagulation. While not meant to be compared to a large hospital unit, the BLENDTOME has been successfully used in many TUR cases. Such facility indicates the brilliant performance of the BLENDTOME.

ALL 4 BASIC SURGICAL CURRENTS

1. *Tube Generated Cutting Current.*
2. *Spark-Gap Generated Coagulation Current.*
3. *A controlled mixed blend of both above currents on selection.*
4. *Mono-polar Oudin Desiccation-Fulguration Current.*



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Write "Blendtome Folder" on your prescription blank or clip your letter head to this advertisement. Reprint of electrosurgical technic mailed free on request. Please indicate your specialty.

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(Continued from Page 468)

Kritikos, M.D., from a privately owned laboratory in Athens, Greece; Isamu Nagai, M.D., of the National Institute of Health, Tokyo, Japan; Osama Kaihara, Chief, National Rural Police, Tokyo, Japan; Hidenori Nakahara, Professor in Police College, Tokyo, Japan; Doom Bunnag of the Division of Laboratories, Department of Medical Sciences, Bangkok, Thailand; M. C. Lee, M.D., of Hsiang-Ya Medical College, Changsha, China; Kenneth MacLeod of the Canadian Department of Health, Prince Edward Island, Canada; and H. A. Ylagan, of United States Public Health Service, Calapan, Mindora, Philippine Islands.

SCALP TRACTION

(Continued from Page 426)

biotics were discontinued on the third postpartum day, and the patient was discharged on the fifth postpartum day.

Discussion

The danger associated with hydrocephalus with cephalic presentation lies in its non-recognition and with the possibility of rupture of the markedly thinned out lower uterine segment associated with the obstructed labor. Puncture of the head early in labor should allow the cervix to be taken up and dilatation to occur more readily than would be the case if the actual disproportion due to the hydrocephalus were left untreated. The flabby head after puncture offers a poor dilating wedge for the cervix. The application of a Willits clamp (a four-toothed tenaculum would do as well) with gentle traction applied in the routine manner improves this situation and serves to stimulate better contractions. Delivery is effected when there is sufficient dilatation.

A procedure has been described which may be carried out in Catholic hospitals, with the exception, of course, of the use of the cranioclast.

At the request of some of our friends we are installing the latest Sanborn Electrocardiograph Machine.

The results will be interpreted by a well known heart specialist.

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Physicians' Service Laboratory

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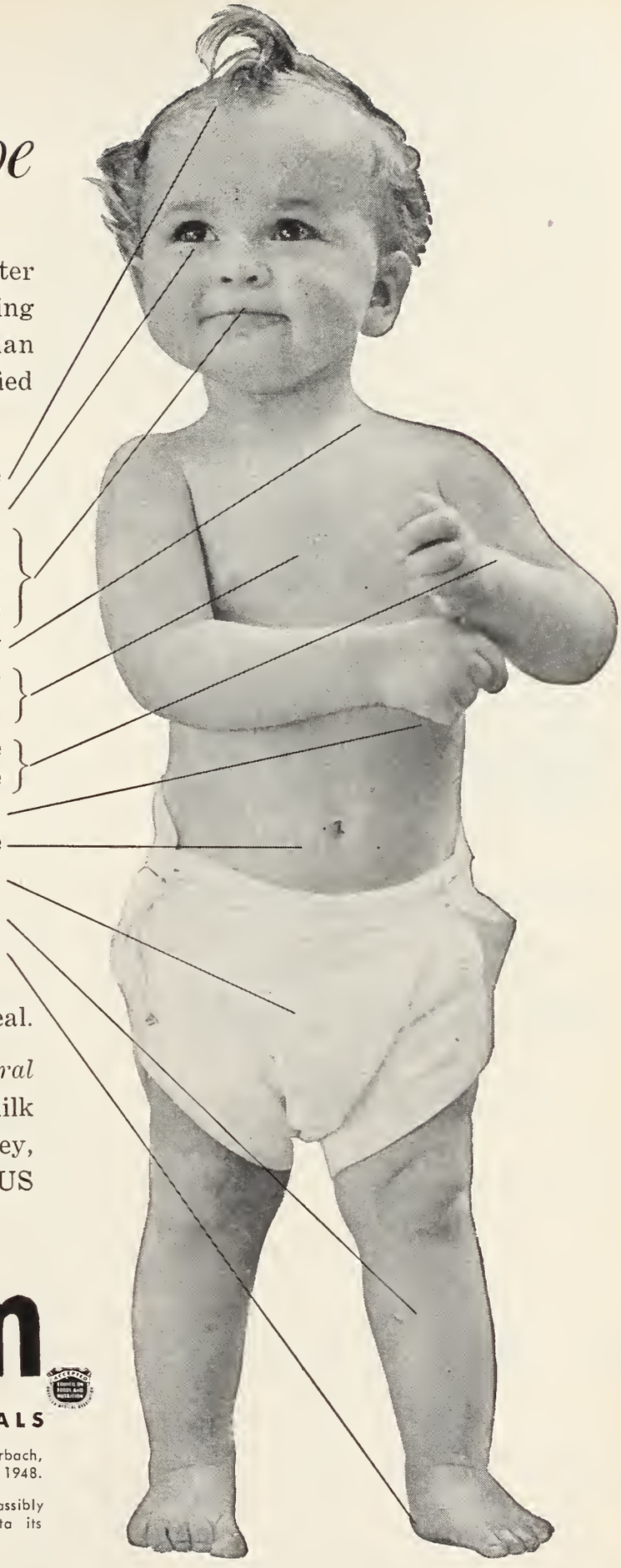
from *head* to *toe*

CEREVIM-fed children showed greater clinical improvement, in the following nutrition-influenced categories, than children fed on ordinary unfortified cereal or no cereal at all:[1]



Here's why: CEREVIM is not just a cereal.

Much more: CEREVIM provides *8 natural foods:* whole wheat meal, oatmeal, milk protein, wheat germ, corn meal, barley, Brewers' dried yeast and malt – PLUS added *vitamins* and *minerals.*

CEREVim

CEREALS + VITAMINS + MINERALS

1. "A Study of Enriched Cereal in Child Feeding" Urbach, C.; Mack, P. B., and Stakes, Jr., J: Pediatrics 1:70, 1948.

*Cerevim contains neither vitamin A nor C but possibly exercises an A-and-C sparing effect attributed to its high content of protein and major B vitamins.

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Communications

March 6, 1950

L. Fernald Foster, M.D.
Secretary, Michigan State Medical Society
2020 Olds Tower
Lansing 8, Michigan

Dear Doctor Foster:

You have asked me to discuss briefly the legal and ethical implications arising from disclosure of professional information by a physician.

The subject has two facets which are often not distinguished, but which in light of your inquiry must be separately considered.

The first is related to disclosures made on the witness stand and is prohibited by what is commonly referred to as the rule of privileged communications. It is essentially a rule of evidence. Often criticized by scholars, this rule is in derogation of common law and finds its authority solely in statute. The second facet has to do with sanctions against the disclosures of professional information by physicians elsewhere than on the witness stand. The law relating to such disclosures is not one of evidence but of substantive law.

A well known legal authority summarizes the law concerning disclosures of professional information in both circumstances as follows:

"It is usually necessary for the patient to communicate to his physician all information having any bearing on his malady or injury, to enable the physician to administer the most helpful and efficacious treatment, and this frequently calls for the communication of information which would be both embarrassing and harmful to the patient if given general circulation. In recognition of this fact, statutes have been enacted throughout the states protecting the patient from compulsory disclosure of confidential communications between patient and physician in judicial proceedings, except where the patient consents thereto or waives the privilege. And it seems that a physician can be held answerable in damages to his patient for injuries resulting to the latter from a wrongful disclosure on the witness stand of confidential information. But a physician is not liable for disclosing on the witness stand information gained while in professional attendance on a patient if the testimony was admissible in the case in which it was given and was relevant and pertinent to the issues, or if it was admitted by the court over objections made to its admissibility; and a complaint against a physician for damages for wrongful disclosure of confidential communications on the witness stand must negative all these conditions.

"As a general rule, a physician is equally liable to his patient for disclosure of professional secrets to third persons elsewhere than on the witness stand. But this rule is qualified by a physician's duty to the public in certain circumstances, as where the patient is afflicted with a dangerous infectious or highly contagious disease, in which case it may be the physician's duty to disclose its existence to the public health officers or authorities, or even to particular individuals who are intimately exposed to the danger of the contagion and who are in ignorance of the nature of the affliction. In such cases, the physician is not liable in damages to his patient if he has rea-

(Continued on Page 474)

There is no better product..

Ramses VAGINAL JELLY

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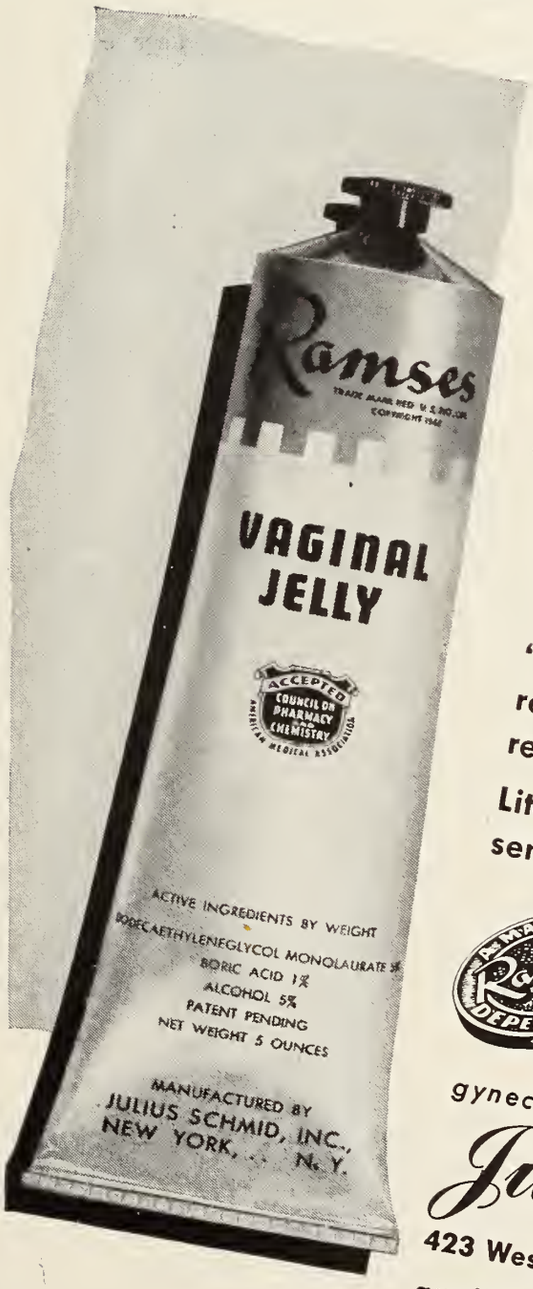

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meets or exceeds every requirement of the Advisory Committee on Contraceptives of the American Medical Association. It is never advertised to the laity and is suggested for use only under the guidance of the physician.

The crystal clarity, agreeable odor, and elegant appearance of "RAMSES"* Vaginal Jelly† make it esthetically acceptable even to the most fastidious patients. As it is nonirritating, nonstaining, and nontoxic, no untoward effects follow its use.

"RAMSES" Vaginal Jelly is available in regular- and large-size tubes through any reliable prescription pharmacy.

Literature and professional samples will be sent to physicians on request.

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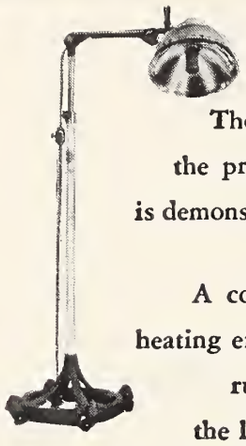

Z-12 Zoalite

The importance of selecting the proper source of infra-red is demonstrated in a recent study.*

A comparison of the tissue-heating effectiveness of the carborundum type element and the light bulb source showed the following:

TEMPERATURE RISE OVER CONTROL AFTER ONE MINUTE OF HEATING

TEMPERATURE RISE, DEGREES C.

SOURCE		ENERGY**
1	Carborundum Type	2.18
2	Bulb Type	2.20

	Skin	Subcutaneous Tissue	Muscle (5 Mm. depth)	Muscle (10 Mm. depth)	Muscle (15 Mm. depth)
1	7.35	4.40	3.10	0.80	0.25
2	5.35	4.00	2.40	0.70	0.21

**Radiant flux density at skin surface.

". . . the carborundum type heater produces a much greater rise of cutaneous temperature and a slightly but yet significantly greater rise of muscle temperature. . ."

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Burdick ZOALITE

Infra-Red Lamps

— with the famous Burdick Carborundum Element — a rich source of infra-red.

*Arch. Physical Medicine, 30:691-99 (November) '49.

THE G. A. INGRAM COMPANY

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(Continued from Page 472)

sonable grounds for his diagnosis, and acts without malice and in good faith to prevent spread of the disease or to protect the individuals from it."

41 AM JUR 196-197

The Michigan statute prohibiting physicians from *testifying* as to professional secrets reads as follows:

"No person duly authorized to practice medicine or surgery shall be allowed to disclose any information which he may have acquired in attending any patient in his professional character, and which information was necessary to enable him to prescribe for such patient as a physician, or to do any act for him as a surgeon. * * *"

The purpose of the foregoing provision is, of course, solely to enable persons to secure proper medical aid without fear of betrayal of confidence. Although this statute is clear and specific, the patient's privilege thus granted extends only as the terms of this statute reasonably construed apply. However, this privilege must be recognized whether asserted in a court of record or even before the hearing board of an insurance order. We shall not endeavor to discuss its application to various situations because your inquiry is more exactly concerned with disclosures made out of court.

The Michigan Medical Practice Act provides, inter alia, as follows:

"The board of registration of medicine may refuse to issue or continue a certificate of registration or license provided for in this section, to any person guilty of grossly unprofessional and dishonest conduct. The words 'unprofessional and dishonest conduct,' as used in this act, are hereby declared to mean: * * * (c) The wilfully betraying of a professional secret * * *.

"It shall be a misdemeanor for any person to be guilty of 'unprofessional and dishonest conduct' as defined in this act. Any person who has been issued a certificate of registration or license under this act, and who shall be charged with the commission of such misdemeanor, shall be tried in a court of competent criminal jurisdiction, and upon conviction thereof shall be fined for each offense not to exceed two hundred and fifty (250) dollars, or shall be imprisoned in the county jail not to exceed three (3) months, or may be both fined and imprisoned, in the discretion of the court. The creation of such misdemeanor by this act shall not be construed to supersede any existing remedy or punishment, whether civil or criminal, for any act embraced within the provisions of this act, but shall be construed to be in addition thereto.

"The board of registration in medicine may, upon the filing with it of a duly certified copy of a final conviction obtained in accordance with the provisions of this act, revoke or suspend for a limited period, not less than six (6) months, the certificate or license of the person to so convicted."

M.S.A. 14.533

It is to be noted that wilfully betraying a professional secret is not only made a misdemeanor, punishable by fine and imprisonment, but is ground for refusing to continue a doctor's certificate of registration as well as for the revocation or suspension of his license.

Aside from the statutory prohibition and penalties above cited, courts have recognized a right of action on part of the patient based on the violation of professional

(Continued on Page 476)

Greater Benefits . . . For More People

$32,000,000 worth of services rendered to subscribers by Michigan Blue Cross—Blue Shield in 1949—up 52% over 1948. Since 1940, total value of services exceeds $128,000,000.

HUNDREDS of thousands of new members joined Michigan Blue Cross-Blue Shield last year, just as they have every year since it was founded. In 1940, Michigan Medical Service (Blue Shield) had 32,402 members, paid $172,115.00 on doctors' bills. In 1949 there were 1,502,000 members and $9,604,193.33 paid on doctors' bills. For Michigan Hospital Service (Blue Cross), the record shows 341,979 members and $867,298.26 paid to hospitals in 1940; 1,692,258 members and a total of $22,400,967.76 paid in 1949!

This amazing growth reflects the fact that these plans offer the most health-care protection at the lowest cost.

Blue Cross-Blue Shield can afford to offer such complete protection because they are *voluntary, wholly non-profit* organizations, sponsored and run by Michigan's hospitals and doctors. For example, last year Blue Shield returned more than 94% of income to subscribers in the form of benefits. The figure for Blue Cross was 89%.

How About Your Employees?

With few exceptions the increase in membership during 1949 has come from the acquisition of employed groups. Today more than 7,000 Michigan organizations make Blue Cross-Blue Shield available to their employees.

Are *your* employees protected against unexpected hospital and medical bills—bills that could spell financial disaster?

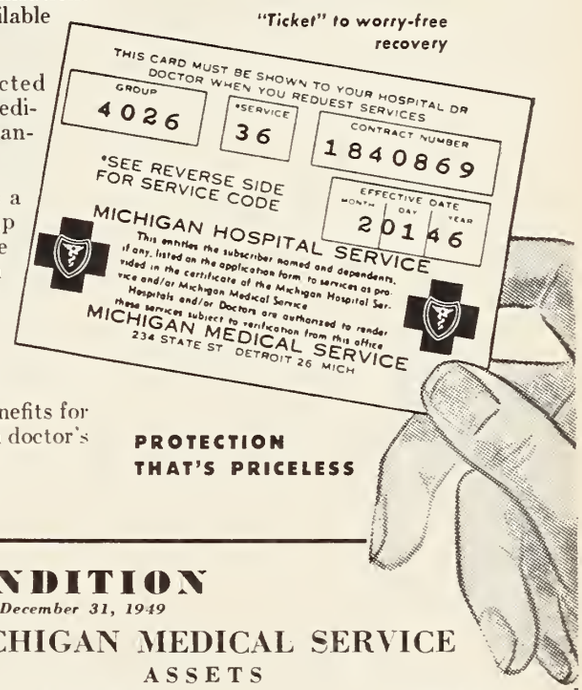
Blue Cross Hospital Plan covers a broad range of hospital services (up to 120 days of care) in any of the 176 participating hospitals in Michigan. NO CASH LIMIT on the benefits covered.

Blue Shield Surgical Plan pays liberal amounts for stated surgical procedures, includes special benefits for emergency (first aid) treatment in doctor's office or hospital.

Blue Shield Medical-Surgical Plan includes all the benefits of the Surgical Plan, plus payments for doctor's hospital care in non-surgical cases.

Blue Cross-Blue Shield offers a sound, businesslike, voluntary means of handling hospital, surgical and medical care for your employees and their dependents. The Plans are simple and easy in operation, eliminate red tape and delay, and provide the best protection at the lowest cost.

Call or write for full details today.



STATEMENT OF CONDITION

Report of Condition as of the Close of Business, December 31, 1949

MICHIGAN HOSPITAL SERVICE

ASSETS

Cash in Banks and Office	$2,676,778.49
United States Treasury and Defense Bonds	6,304,740.90
Accrued Interest	30,825.54
Subscription Fees—Receivable	117,123.16
Other Assets	178,603.93
Total Assets	$9,308,072.02

LIABILITIES AND RESERVES

Reserves for Payment for Services Rendered Subscribers (Including Unreported)	$4,069,732.42
Reserve for Unearned Subscription Fees	1,773,522.46
Reserve for Contingencies	3,330,912.70
Other Liabilities	133,904.44
Total Liabilities and Reserves	$9,308,072.02
Total Benefits Paid Since Inception	$84,887,653.61

MICHIGAN MEDICAL SERVICE

ASSETS

Cash in Banks and Office	$1,069,364.39
Real Estate—Home Office Property	667,398.01
United States and Canadian Government Bonds	1,726,694.44
Interest and Rents Due and Accrued	24,060.40
Subscription Fees-Receivable	37,813.84
Funds Advanced for Veterans Administration	117,812.50
Other Assets	14,629.48
Total Assets	$3,657,773.06

LIABILITIES AND RESERVES

Reserve for Payments for Services Rendered Subscribers (Including Unreported	$1,682,547.07
Reserve for Unearned Subscription Fees	679,165.18
Reserve for Contingencies	1,247,024.05
Other Liabilities	49,036.76
Total Liabilities and Reserves	$3,657,773.06
Total Benefits Paid Since Inception	$43,203,004.82

The Hospitals' and Doctors' Own Non-Profit Health Plan for the Welfare of the Public

BLUE CROSS BLUE SHIELD*

MICHIGAN HOSPITAL SERVICE MICHIGAN MEDICAL SERVICE

*Commonly known in Michigan as Blue Cross Surgical Plan

234 State Street • Detroit 26

(Continued from Page 474)

confidence by unauthorized disclosures, in at least three reported cases.

"In *Simonsen v. Swenson (Neb.) 177 N.W. 831,* the defendant physician had examined the plaintiff, and finding him to be afflicted with a highly contagious venereal disease, requested him to leave the boardinghouse where he was living. Later finding the plaintiff still there, the physician informed the proprietor of the nature of the disease. The plaintiff was forced to leave the boarding house, although, in fact, he was not suffering with the disease diagnosed by the physician. The patient sued the physician for breach of the duty of secrecy. It was held that the plaintiff could not recover because under the circumstances, the occasion was privileged. The court said that the information given to a physician by his patient, though confidential, must be given and received subject to the qualification that if the patient's disease is found to be of a dangerous and of so highly contagious or infectious a nature that it would necessarily be transmitted to others unless the danger of contagion is disclosed to them, then the physician should, in the event that no other means of protection is possible, be privileged to make so much of a disclosure to such persons as is necessary to prevent the spread of the disease. A disclosure in such case would not be a betrayal of the confidence of the patient, the physician acting in good faith without malice, even though the physician is mistaken in diagnosis."

"In *Smith v. Driscoll, et al. (Wash.) 162 Pac. 572,* there was an allegation of wrongful publication and disclosure of confidential information acquired by the defendants in their professional capacity. The court said that it was unnecessary to pursue at length the inquiry of whether a cause of action lies in favor of a patient against a physician for wrongfully divulging confidential communications, but that, for the purposes of what the court would say, it would be presumed that, for so palpable a wrong, the law provides a remedy."

"And the 'wilful betraying of a professional secret,' declared by statute to be unprofessional conduct authorizing revocation of a physician's license, has been held not to embrace a harmless disclosure which he may make, such as was contained in confidential letters to his former office girl with reference to certain female patients, to one of whom he had given general information about sex matters, with which she appeared to be unfamiliar, and others of whom had had ordinary operations, including a child delivery. McPheeters v. Medical Examiners (1930) 103 Cal. App. 297, 284 Pac. 938."

In addition to the applicable rules of law, there are well established ethical considerations bearing on the subject. The oath of Hippocrates, which has been the recognized guide of the medical profession for almost 2400 years, contains the following avowal:

"Whatever in connection with my professional practice, or not in connection with it, I see or hear, in the life of men, which ought not to be spoken of abroad, I will not divulge as reckoning that all such should be kept secret."

The Principles of Medical Ethics adopted by the American Medical Association provide, inter alia, as follows:

"CHAPTER II, Section 1.—Patience and delicacy should characterize all the acts of a physician. The confidences concerning individual or domestic life en-

(Continued on Page 478)

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(Continued from Page 476)

trusted by a patient to a physician and the defects of disposition or flaws of character observed in patients during medical attendance should be held as a trust and should never be revealed except when imperatively required by the laws of the state. There are occasions, however, when a physician must determine whether or not his duty to society requires him to take definite action to protect a healthy individual from becoming infected, because the physician has knowledge, obtained through the confidences entrusted to him as a physician, of a communicable disease to which the healthy individual is about to be exposed. In such a case, the physician should act as he would desire another to act toward one of his own family under like circumstances. Before he determines his course, the physician should know the civil law of his commonwealth concerning privileged communications."

What information obtained in the course of professional relationship ought to be regarded as the subject of inviolable confidence, particularly in situations out of court, where there is no judge to pass upon the propriety of disclosures, must necessarily be determined by the professional sense and delicacy of the individual doctor. However, in light of the well established legal and ethical prohibitions, all cases of doubt should be resolved against unauthorized disclosures.

Very truly yours,
J. Joseph Herbert
MSMS General Counsel

The following letter is in response to one asking the attitude of the State Health Commission on the subject of Socialized medicine.

Lansing, Michigan
November 15, 1949

Mrs. .....
R.R. #1
....., Michigan
Dear Mrs. .....:

I was pleased to receive your letter of November 12 and your comment on the talk I gave at the Farm Bureau Convention. I would like to point out again that a health department represents the most effective and efficient way of doing certain things to better the health of the community. Every person in Michigan has a need for and right to expect the services of a trained medical health officer, a public health nurse, and a sanitary engineer or sanitarian. The work performed by the members of the health department's staff, under the direction of the health officer, has been endorsed by many national groups including the Farm Bureau, the Grange, various labor organizations, the National Congress of Parents and Teachers, and also the American Medical Association.

In reply to the specific question you raised, I would like to point out the following ways in which health departments are of value in eliminating the need for a program of compulsory medical care:

Say you saw it in the Journal of the Michigan State Medical Society

1. The health officer and his staff, by making a study of the causes of death in the community, the causes of major illness, and other health problems peculiar to the area, point out the need for action programs that will cope with these problems and thus improve the health of the community.

2. By sitting down and conferring with representatives of the schools, parent groups, medical and dental organizations, and voluntary agencies, programs are set up to improve the health of pre-school and school age children. In this way many of the defects that proponents of socialized medicine point to when they argue for the need for their program can be discovered and corrected, thus removing a major argument for compulsory medical care programs.

3. In similar fashion, health departments have stimulated communities to improve the sanitation of their environment by getting a good water supply, proper sewage disposal, a clean and safe milk supply, and good food handling establishments.

4. The health officers and his staff, by working cooperatively with the medical, dental, and hospital personnel in the community, act to make possible the best use of the available resources of the community for the betterment of the health of all the people. Many communities have organized for action against such problems of adult health as cancer and diabetes.

In closing, I would point out that public health workers recognize that we, as individuals, have a fundamental responsibility for our own health. Thus, the aim of public health has been to work with individuals and with groups of individuals for the betterment of the health of the community. Even free medical care will not automatically improve the health of the community unless individuals recognize their health needs. Health department workers, through their educational program, help to make individuals aware of their health needs and also to provide means of securing assistance when necessary. As I said at the Farm Bureau Convention one week ago, every effort should be made to solve the community's health problems democratically before considering as drastic and expensive an undertaking as so-called socialized medicine. We believe that a county health department can play an important part in eliminating the need for this program.

Yours truly,

Albert E. Heustis, M.D.
Commissioner
Michigan Department of Health

Lansing, Michigan
March 8, 1950

Wilfrid Haughey, M.D., Editor
Michigan State Medical Society Journal
Battle Creek, Michigan

Dear Mr. Haughey:

Our Division of Industrial Health has recently informed me that a new insecticide, Parathion, is going to be used in increasing quantities during the coming year. Parathion is a highly toxic nerve poison causing stimulation of the parasympathetic nervous system and was responsible for several deaths as well as many near fatalities during its limited use last year.

In co-operation with Michigan State College, we have been carrying out an extensive educational program directed to the safe use of the material. We believe it is important at this time to acquaint the physicians of the state with the toxicity of Parathion as well as with the specific antidote required in the treatment of the acute

poisoning. Enclosed for your information is a copy of a circular prepared by the American Cyanamid Company, the largest producer of Parathion. Similar information is also being sent to the editors of the county medical society bulletins.

Sincerely,

ALBERT E. HEUSTIS, M.D.
Commissioner

NOTE TO PHYSICIANS

Parathion inactivates the cholinesterase enzymes of the blood and tissues and, therefore, the signs and symptoms resulting from excessive absorption are primarily those of marked parasympathetic stimulation. Hyperhidrosis, miosis, lachrymation and salivation may be noted in addition to signs and symptoms noted above. If the patient has already taken atropine, as indicated above, the physician should administer additional doses of grains 1/60 to 1/30 (one or two mg.) of atropine every hour up to ten or 20 mg. in a day if necessary to control the respiratory symptoms and keep the patient FULLY atropinized. The intravenous route is the most rapid. It will be noted that the dosage of atropine here is in excess of amounts conventionally employed, but within safe limits. For mild poisoning this treatment alone is sufficient.

Do not give morphine. If pulmonary secretions have accumulated before atropine has become effective, the patient must be turned upside down to cough out mucus. The parasympathetic effect on the heart and lungs is blocked by atropine. Weakness and muscular twitching are not controlled by this antidote. Even with very serious poisoning, atropine can completely protect the airway, but muscular weakness may become so extreme that artificial respiration is required. Insert a tracheal tube. Suck mucus from bronchi with a catheter. Empty distended stomach with Levine tube. Complete recovery may be expected even after a very severe acute poisoning and many hours of artificial respiration. Administration of oxygen is indicated provided that adequate attention to the airway has been given. The acute emergency lasts 24 to 48 hours; patient must be watched continuously during this interval. Following exposure heavy enough to produce symptoms, further organic phosphate insecticide exposure should be avoided. The patient remains susceptible to relatively small exposures of parathion until regeneration of blood and tissue cholinesterase is nearly complete. Other organic phosphate insecticides also inactivate cholinesterase. Persons exposed to these become susceptible to parathion and vice versa.

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Surgery of Colon and Rectum, one week, starting April 10, May 15.
Esophageal Surgery, one week, starting June 5.
Breast and Thyroid Surgery, one week, starting June 26.
Thoracic Surgery, one week, starting June 12.
Gallbladder Surgery, ten hours, starting April 24.
Fractures and Traumatic Surgery, two weeks, starting June 12.
Basic Principles in General Surgery, two weeks, starting, September 11.
GYNECOLOGY—Intensive Course, two weeks, starting April 17, June 19.
Vaginal Approach to Pelvic Surgery, one week, starting May 15.
OBSTETRICS—Intensive Course, two weeks, starting April 3, June 5.
PEDIATRICS—Intensive Course, two weeks, starting April 3.
Personal Course in Cerebral Palsy, two weeks, starting July 31.
Personal Course in Diagnosis and Treatment of Congenital Malformations of the Heart, two weeks, starting June 5.
MEDICINE—Intensive General Course, two weeks, starting April 24.
Electrocardiography and Heart Disease, two weeks, starting July 17.
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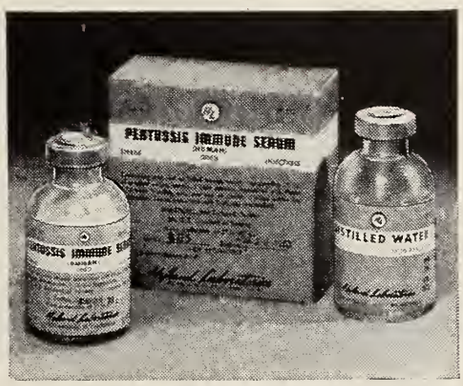

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In Memoriam

Charles James Barone, M.D., of Highland Park, Michigan, was born January 5, 1894 and was graduated from George Washington University School of Medicine in 1919. Doctor Barone had been associated with the Highland Park Hospital since 1924 and formerly its chief of staff. He also served as Highland Park City physician during the period 1937-1946. At the time of his death, Dr. Barone was secretary of the Wayne County Medical Society, a member of the Michigan State Medical Society and of the American Medical Association. Doctor Barone died January 24, 1950 in Highland Park at the age of fifty-six.

Edward Deal Finch, M.D., of Howell, Michigan, was born in Alma in 1907 and was graduated from the University of Michigan Medical School in 1936. He was a member of the Livingston County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor Finch was assistant superintendent of the State Sanitarium at Howell. He died on January 31, 1950 at the age of forty-two.

Nathaniel A. Herring, M.D., of Niles, Michigan, was born December 27, 1856 in Goshen, Indiana, and was graduated from the Bennett College of Medicine and Surgery, Chicago, in 1880. He was a past president of the Berrien County Medical Society, an emeritus member of the Michigan State Medical Society and a member of the American Medical Association. Doctor Herring had practiced medicine for sixty eight years prior to his retirement. He died January 28, 1950 at the age of ninety-four in Niles.

Harry Kok, M.D., of Benton Harbor, Michigan, was born October 16, 1898 in Amsterdam, Holland, and was graduated from the University of Michigan Medical School in 1929. He was a member of the Berrien County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor Kok was radiologist at Mercy Hospital of Benton Harbor for fifteen years, was a diplomate of the American Board of Radiology, the Southwestern Michigan Academy of Medicine, a Past President of the Berrien County Medical Society, and former chief of staff of Mercy Hospital. Doctor Kok died December 11, 1949, in Benton Harbor at the age of fifty-two.

John Kremer, M.D., of Grand Rapids, was born August 3, 1876 and was graduated from the Rush Medical College in 1902. He took postgraduate studies at New York Academy of Medicine and the Johns Hopkins University. Doctor Kremer was former chief of medicine at Butterworth Hospital, was a member of the Kent County Medical Society, a life member of the Michigan State Medical Society and a member of the

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American Medical Association. He died January 2, 1950 in Grand Rapids at the age of seventy-three.

Archibald Blythe Thompson, M.D., of Grand Rapids, was born February 1, 1865 in Blythe, Ontario, Canada, and was graduated from the University of Edinburgh, Scotland, in 1887. He also attended the Trinity Medical College in Toronto. Doctor Thompson was a life member of the Kent County Medical Society, an emeritus member of the Michigan State Medical Society and a member of the American Medical Association. He died January 19, 1950 in Grand Rapids at the age of eighty-four.

Marcus Robinson Van Baalen, M.D., of Detroit was born in 1883 and was graduated from the Detroit College of Medicine and Surgery in 1904. He was a member of the Wayne County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor Van Baalen had practiced medicine in Detroit for forty-seven years. He was sixty-seven years of age at the time of his death on January 30, 1950.

The Kent County Medical Society invites all MSMS members to its "Western Michigan Clinic Day" in Civic Auditorium, Grand Rapids, Thursday, May 18, 1950.

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AMA Membership Gain in 1949.—As of January 1, 1950, the American Medical Association membership stood at 144,212, a gain of 4,171 during the year. The total figure allowed for the 2,179 deaths which occurred during 1949. The number of AMA Fellows at the first of the year was 78,571, a gain of 2,548.

—AMA Secretary's Letter No. 135

* * *

Membership Size of County Societies.—On the basis of an incomplete tabulation of county medical societies made by the AMA Bureau of Medical Economic Research, there are approximately 71 county societies with 300 or more members. Here is a breakdown of the figures on the basis of data which is almost complete:

Membership Size	Number	Membership
300 and over	71	72,485
200-299	40	9,707
100-199	114	15,630
Under 100	1,705	41,074
Total	1,930	138,896

* * *

Arthur C. Curtis, M.D., Ann Arbor, addressed the American Academy of General Practice at its 1950 Scientific Assembly in St. Louis on February 20.

J. S. DeTar, M.D., Milan, was toastmaster at the Academy Banquet of February 22, attended by 1,500 members and their ladies.

* * *

A. D. Ruedemann, M.D., Detroit, was a guest speaker at the annual meeting of the American Goiter Association in Houston, Texas, on March 10. His subject was "Ocular Manifestation of Thyroid Disease: Early Diagnosis and Treatment."

* * *

The Ingham County Medical Society's Sixteenth Annual May Clinic will be held at the Hotel Olds, Lansing, on Thursday, May 4, beginning at 2:00 p.m. This year's Clinic will take the form of a Symposium on "Diseases of the Upper Gastro-intestinal Tract," conducted by members of the staff of Lahey Clinic, Boston, Massachusetts. The afternoon session will consist of four talks:

1. Pathological Physiology, Symptomatology and Diagnosis of the Stomach and Esophagus—by Everett D. Kiefer, M.D.
2. Surgery of the Esophagus and Stomach—by Richard B. Cattell, M.D.
3. Problems in the Medical Management of Duodenal Ulcer—by Everett D. Kiefer, M.D.
4. Surgical Management of Peptic Ulcer—by Richard B. Cattell, M.D.

A social hour will follow the afternoon addresses. At the evening dinner-meeting, Dr. Cattell will speak on "The Management of Surgical Diseases of the Pancreas."

The Ingham County Medical Society through its President, Ralph Wadley, M.D., Lansing, cordially invites all members of the Michigan State Medical Society to attend the Clinic of May 4 in Lansing. No admission fee.

* * *

Edgar E. Poos, M.D., Detroit, presented a paper before the annual meeting of the American College of Allergists in St. Louis on January 18. The subject was "Mechanism of Allergy of the Eye and Its Adnexia."

* * *

George L. Waldbott, M.D., Detroit, also presented a paper at the Allergists' meeting on January 18, entitled "Organization of an Allergy Office."

* * *

The American Physicians Art Association will have its twelfth exhibition at the AMA Convention, San Francisco Auditorium, June 26-30. For entry blanks, address the Secretary, F. H. Redewill, M.D., 526 Flood Bldg., San Francisco 2, California.

The APAA has 4,000 members and is desirous of having every physician who does art work participate.

* * *

The American Congress of Physical Medicine will hold its 28th Annual Scientific and Clinical Session at the Hotel Statler, Boston, on August 28 through September 1, 1950. For program and information, write the Congress at 30 N. Michigan Avenue, Chicago 2, Illinois.

* * *

Employment opportunities for civilian medical personnel in the Pacific Islands (including the Marshall, Caroline, and Marianas Islands). Medical positions for the government of these areas have been established by the Department of the Interior. Positions for doctors of medicine, public health officers, hospital administrators, et cetera, are available. Salaries for M.D.'s range from $6,400 to $8,800 per annum with a post differential of 25 per cent in addition to salary, and transportation paid for employees and their dependents. For further information, write Division of Territories and Island Possessions, Department of the Interior, Washington 25, D. C.

* * *

The Medical and Surgical Relief Committee, Inc., 420 Lexington Ave., New York 17, N. Y., solicits the help of state and county medical societies and their auxiliaries in collecting and shipping prepaid to the Committee medical and dental samples and used instruments in good condition. The Committee also would appreciate efforts to obtain from pharmaceutical concerns gifts of surplus or out-dated material of any kind, to be

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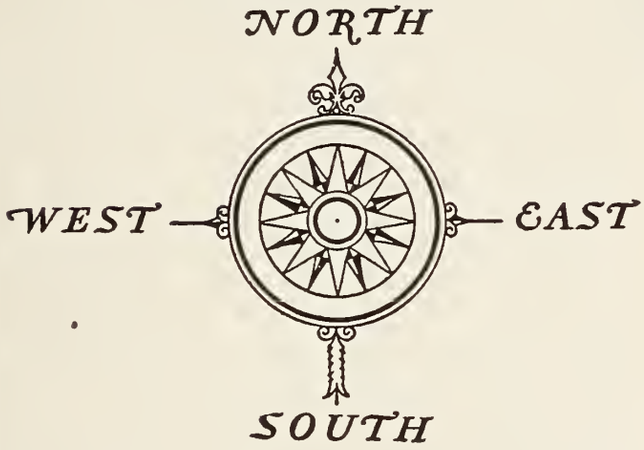

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Allen O. Whipple, M.D., recently Professor of Surgery at Columbia University, heads the Medical Advisory Council of the Medical and Surgical Relief Committee, Inc.

* * *

Brigadier General Wallace H. Graham, personal physician to the President, recently was appointed Special Assistant on Medical Reserve Affairs to Major General Harry G. Armstrong, Air Surgeon General. The new assignment will be additional to his duties as the President's physician.

* * *

The American College of Chest Physicians offers an annual cash prize award of $250, for the best original contribution, preferably by a young investigator, on any phase relating to chest disease. Manuscripts must be submitted no later than May 1. For additional information write the College at 500 N. Dearborn Street, Chicago 10, Illinois.

* * *

Postgraduate courses arranged by the American College of Physicians in the spring and summer of 1950 are listed in the ACP's Preliminary Bulletin. For a copy, write E. R., Loveland, Executive Secretary, 4200 Pine St., Philadelphia 4, Pa.

Michigan's Rheumatic Fever Control Program is a most unique, as well as important and life-saving effort—and deserves the support of every member of the Michigan State Medical Society.

The program has considerable value from the standpoint of public relations. It is a service to the general practitioner to help him in the better diagnosis of patients suspected of rheumatic fever. It preserves the physician-patient relationship. All patients, referred by doctors of medicine to the Center, are routinely sent back to the referring doctor for treatment. The doctors of medicine who actually do the diagnostic work in the Rheumatic Fever Control Center are compensated by receiving an added opportunity to study the many aspects of rheumatic fever, a most baffling disease.

H. V. Lilga, M.D. of Petoskey addressed the Cadillac Rotary Club on February 7. His subject was "The Welfare State."

* * *

Wm. L. Brosius, M.D., Detroit, presented the 1950 Sykes Lecture on the occasion of the Michigan Postgraduate Clinical Institute, on March 9, 1950 in Detroit. This lecture was created four years ago by R. S. Sykes, D.D.S., of Muir, Michigan. to aid in the differential diagnosis of benign and malignant tumors.

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(Near Chicago)

University of Michigan Men's Glee Club sings at MPGCI.—On the occasion of the Wednesday evening meeting, March 8—during the Michigan Postgraduate Clinical Institute, 1950—the University of Michigan's Men's Glee Club entertained with one-half hour's splendid performance of choral singing, under the direction of Professor Philip A. Duey. One of the features was a song sung in honor of J. Charles Maxwell, M.D. of Paw Paw, Michigan's Foremost Family Physician for 1949.

Dr. Maxwell was honored by receiving a scroll from the Michigan State Medical Society, commemorating his long, tireless and fruitful service in the practice of medicine for over 50 years.

MSMS Past President P. L. Ledwidge, M.D., Detroit, also was presented a scroll for his service to Medicine and to the Michigan State Medical Society for many years. Dr. Ledwidge was Chairman of the 1950 MPGCI.

Grover C. Penberthy, M.D., Detroit, spoke on his recent experiences in England, investigating England's socialized medicine experiment. A spirited question and answer period followed Dr. Penberthy's presentation.

The public meeting of March 8 was chairmanned by R. J. Hubbell, M.D., Kalamazoo, Vice Chairman of the MSMS Council.

* * *

The Panama Canal needs civilian physicians for duty in the Canal Zone. Salaries range from $6,750 a year to $9,500 a year. For further information, write B. F. Burdick, Chief of Office, The Panama Canal, Washington 25, D. C.

* * *

"**Cancer: Problem for Early Diagnosis**" is a new professional film just released by the American Cancer Society which is available to doctors of medicine. For information or use of this film, write the Michigan Division of the American Cancer Society, 321 Houseman Bldg., Grand Rapids 2, Michigan.

* * *

Raymond Hussey, M. D., recently Dean of the School of Occupational Health, Wayne University, Detroit, has joined the staff of the AMA Council on Industrial Health as Scientific Director.

* * *

The **International** and **Fourth American Congress on** Obstetrics and Gynecology will be held at the Hotel Statler, New York, May 14, 19, 1950. For further information and program write Fred L. Adair, M.D., 161 E. Erie Street, Chicago 11, Illinois.

* * *

The Medical Radio Series, sponsored by the Michigan State Medical Society and the University of Michigan Extension Department, is presenting four talks over Radio Station WUOM (University of Michigan) during April:

1. April 3—"Cancer of the Prostate" . . . William Baum, M.D.
2. April 10—"What Every Person Should Know About Heart Disease" . . . Alexander Goetz, M.D.
3. April 17—"Cancer from the Broad Aspects" . . . Harold B. Fenech, M.D., Detroit
4. April 24—"Significance of Cough" . . . W. D. Harrelson, M.D., Ann Arbor

The Medical Series is broadcast over WUOM Mondays at 2:30 p.m. Other stations carrying the Medical Series include WKAR, East Lansing; WJJW, (F.M.) Wyandotte; WMLN, Mt. Clemens; WFRS (F.M.) Grand Rapids; WTCM, Traverse City—broadcast over WATT, Cadillac; WATZ, Alpena; WMBN, Petoskey; and WRZE of York, Pa.

* * *

The 1950 spring and summer schedule in postgraduate medicine, arranged by the University of Michigan Medical School, will include courses on Allergy, Anatomy, Diseases of Blood and Blood Forming Organia, Electrocardiographic Diagnosis, Diseases of the Gastro-Intestinal Tract, Diseases of the Heart, Metabolism and Endocrinology, Neurology, Ophthalmology, Pediatrics, Rheumatic Disease, Diagnostic Roentgenology, and Recent Advances in Therapeutics.

Guest lecturers will include Julian M. Ruffin, M.D., Duke University; Karl D. Figley, M.D., Toledo; B. A. Credille, M.D., Flint; Herman Elwyn, M.D., N. Y., John B. Hitz, M.D. Milwaukee; Albert E. Sloane, M.D, Cambridge, Mass.; Kenneth C. Swan, M.D., Oregon; and Paul L. Cusick, M.D., Detroit.

The program schedule consists of thirteen review courses of varying length in special fields of practice. In addition, two courses in clinical exercises will be continued over from the fall schedule.

For program, write H. H. Cummings, M.D., Department of Postgraduate Medical Education, University Hospital, Ann Arbor.

Say you saw it in the Journal of the Michigan State Medical Society

An Observation on the Accuracy of Digitalis Doses

Withering made this penetrating observation in his classic monograph on digitalis: "The more I saw of the great powers of this plant, the more it seemed necessary to bring the doses of it to the greatest possible accuracy."[1]

To achieve the greatest accuracy in dosage and at the same time to preserve the full activity of the leaf, the total cardioactive principles must be isolated from the plant in pure crystalline form so that doses can be based on the actual weight of the active constituents. This is, in fact, the method by which Digilanid® is made.

Digilanid contains all the *initial* glycosides from Digitalis lanata in crystalline form. It thus truly represents "the great powers of the plant" and brings "the doses of it to the greatest possible accuracy".

Clinical investigation has proved that Digilanid is "an effective cardioactive preparation, which has the advantages of purity, stability and accuracy as to dosage and therapeutic effect."[2]

Average dose for initiating treatment: 2 to 4 tablets of Digilanid daily until the desired therapeutic level is reached.
Average maintenance dose: 1 tablet daily.
Also available: Drops, Ampuls and Suppositories.

1. *Withering, W.:* An account of the Foxglove, London, 1785.
2. *Rimmerman, A. B.:* Digilanid and the Therapy of Congestive Heart Disease, Am. J. M. Sc. *209:* 33-41 (Jan.) 1945.

Literature giving further details about Digilanid and Physician's Trial Supply are available on request.

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Reprints received: "The Effect of Antihistamine Agent on various whealing Phenomena" and "Spectral Absorption Characteristics of Antihistaminic Drugs; Relationship to Ultraviolet Erythema"—both by Alex S. and Sidney Friedlander, M.D., Detroit, with J. M. VandenBelt, Ph.D., Detroit, collaborating in the second paper. Also, "Acute Secondary Glaucoma Due to Spontaneous Rupture of the Lens Capsule" by H. Saul Sugar, M.D., Detroit.

* * *

The American Academy of Neurology held its first interim meeting in Cincinnati on April 14 and 15, 1950. The meeting this year was held in conjunction with the American Chapter of the International League Against Epilepsy which met on April 15 and 16. On April 15 there was a joint meeting between the two societies and a large symposium on psychomotor epilepsy.

* * *

Venereal Disease Control.—Just because you can dramatically shorten the period of treatment of early syphilis by antibiotics—do not neglect examining the spinal fluid. This safeguard has helped make central nervous system syphilis much less common.

* * *

The Iowa State Medical Society at its centennial meeting in Burlington, Iowa, April 23-26, 1950 will feature two Michigan doctors. **A. D. Ruedemann, M.D.,** Detroit, will give two papers: "Headaches and Head Pains of Occular Origin" and "The Cataract, A Medical Problem." **Reed M. Nesbit, M.D.,** Ann Arbor, will give a paper, "Clinical Management of Infertility."

The General Practitioner of Australia and New Zealand, in January, 1950, copied a paper by **Howard H. Cummings, M.D.,** of Ann Arbor, "The Climacteric and its Management," which appeared first in THE JOURNAL of the Michigan State Medical Society.

A Surgical Program in a Local Sanatorium

For the first time, the role of chest surgery in the treatment of tuberculosis has been filmed in full color. Prepared for medical audiences, this fifty-minute motion picture with sound might well form the central theme for an evening's discussion on tuberculosis. The film is available without charge to Michigan Medical Societies.

Michigan Tuberculosis Association

The Bay County Medical Society entertained approximately 125 Medical Assistants in Bay City at an annual dinner meeting Wednesday, February 22. D. J. Mosier, M.D., president of the local society, and Mrs. E. Billette, president of the Medical Assistants group, presided over the program which featured a speech by Mr. Henry Black of Professional Management, Battle Creek, Michigan.

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SEVENTH NATIONAL CONFERENCE OF COUNTY MEDICAL SOCIETY OFFICERS

Sunday—June 25, 1950

Palace Hotel—San Francisco

Morning Session—9:00 a.m.

Registration

Call to Order—A. M. Mitchell, M.D., Chairman, Terre Haute, Indiana

Address of Welcome—(Member of the Board of Trustees)

I. WHAT DO YOU KNOW FOR SURE?
   A true and false questionnaire on socialized medicine to be given to everyone in the audience with 20 minutes allowed for answering. At the end of this period the papers will be collected and corrected during the remainder of the program. Results will be announced at the end of the morning session.

II. HOW TO SET UP A COUNTY MEDICAL SOCIETY RECORD SYSTEM
   (A) 20 minutes of presentation
   (B) 20 minutes for discussion

III. HOW TO ORGANIZE A COMMUNITY HEALTH COUNCIL
   (A) 30 minutes of presentation
   (B) 30 minutes of discussion

IV. PROVIDING SPECIAL BENEFITS THROUGH COUNTY MEDICAL SOCIETY MEMBERSHIP (Group—A & H, Malpractice, Medical and Hospital, and Life)
   (A) 20 minutes of presentation
   (B) 20 minutes of discussion

V. RESULTS OF QUIZ

Evening Session—8:00 p.m.

I. THE THIRD PARTY IN THE PRACTICE OF MEDICINE
   (This refers to insurance companies, hospital and medical care plans, etc.)
   (A) 20 minutes of presentation
   (B) 20 minutes of discussion

II. HOSPITALS AND THE PRACTICE OF MEDICINE
   (A) 20 minutes of presentation
   (B) 20 minutes of discussion

THIRD ANNUAL INSTITUTE ON LIVING IN THE LATER YEARS

The Institute for Human Adjustment, in co-operation with the Extension Service of the University of Michigan, announces the Third Annual Institute on Living in the Later Years to be held in Ann Arbor, Michigan, on June 28, 29, and 30, 1950.

Program

Mental Health Problems of an Aging Population

Mental Health in the Aging Population
Changes in Emotional Needs with Aging
Psychiatric Techniques in the Treatment of Older People

Medical Problems of an Aging Population

Chronic Disease and Its Control in Older Persons
Community Health Services for Older People
The Industrial Physician and the Older Worker

Education for an Aging Population

Responsibility of Education to the Older Adult
Proposed Programs in Education for an Aging Population
Training for Volunteers in Community Services with Older People

Special Features

Addresses:

Our Aging Population—A New Social Frontier
The Need for a National Program on Old Age
Age As Opportunity

Organized Discussion Groups:

Psychological Aspects of Medical Practice with Older People
The Chronically Ill in the Family and the Local Community
The Role of the Local Department of Adult Education with Reference to Aging
Education's Contributions to the Adjustment of the Older Person

Demonstration:

An Activities Center for Older People

Persons interested in attending are invited to write to the University of Michigan Extension Service, 4524 Administration Building, Ann Arbor, Michigan, for further information.

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Hans B. Molholm, M.D.
Walter L. Moore, M.D.

Michigan Authors

Leo J. Croll, M.D., and Maurice Croll, Detroit, published a paper, "Hole in the Macula" in the *American Journal of Ophthalmology,* February, 1950.

H. Saul Sugar, M.D., Detroit, published a paper, "Acute and Secondary Glaucoma due to Lens Capsule Rupture" in the *American Journal Ophthalmology,* January, 1950.

William G. McEvitt, M.D., Detroit, published a paper, "Treatment of Acne Pits," in *The Journal of the American Medical Association,* March 4, 1950.

Conrad R. Lam, M.D., Detroit, published a paper, "Treatment of Traumatic Hernia of the Diaphragm," in the *Archives of Surgery,* March, 1950.

Kenneth N. Campbell, M.D., Detroit, published a paper, "Pathogenesis of Acute Hemorrhagic Pancreatitis," in the *Archives of Surgery,* March, 1950.

John E. Webster, M.D., F.A.C.S., and **E. S. Gurdjian, M.D., F.A.C.S.,** Detroit, published an article, "Collective Review: The Surgical Management and a Report of twenty-three Cases of Civilian, thirty-three Cases of Military Abscess," in *Surgery Gynecology and Obstetrics,* March, 1950.

* * *

Joint Committee Recommends Voluntary Health Plan.—After extensive hearings, a Senate-House Subcommittee has made recommendations to raise the living standards of low-income families (Final Report on Low-Income Families and Economic Stability). Three Democrats and one Republican signed the majority report. It made no mention of President Truman's compulsory health insurance plan, but recommended a program based on "voluntary co-operation of public and private agencies, which will permit all persons who so desire to participate in a system of health insurance." The Committee also favors expansion of hospital construction, federal aid for training of doctors and nurses, expansion of medical schools and public health services.

On other issues the Committee recommended: 1. More liberal benefits for dependent children under social security and expanded and improved health services for school children. 2. Social insurance against permanent and total disability and more Federal money for rehabilitation of physically handicapped. 3. Universal old-age insurance coverage, with higher benefits and pay-as-you-go financing.

* * *

British Election Reaction.—Qualified observers of Britain's election develops these ideas:

1. The "welfare state" was not an issue in the election; the issue was whether the "welfare state" should operate with or without government ownership of industries. The Labor party's narrow margin of victory indicates the British people don't want any more nationalization right away. More practically, Labor would risk a major policy defeat in Commons if it pressed for more nationalization.

2. Socialized medicine was never made an issue in the election, and Labor has no intention of making drastic changes in the program.

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VA Tightens Up on Non-Service Connected Cases.—Its current economy campaign is giving Veterans Administration an opportunity to start solving a long-standing problem—the treatment of veterans whose injuries and illnesses are not service-connected. Up to now a high percentage of VA patients have been in this category.

Under the law, VA is "permitted" to treat such patients if beds are available. In practice, the beds have been made available. Important VA officials have complained in private about this practice, but have not had much success in changing it. A VA spokesman said that the personnel cutbacks would have no effect on medical treatment of service-connected cases or of non-service connected cases now in hospitals, but that they "might lessen the number of non-service connected patients the hospitals will be allowed to handle." This is the first reduction-in-force to reach VA's medical department. The Administration's overall payroll will be cut by about 7,800, approximately 3,000 of them in medical and hospital services. However, in view of known requirements of VA, it is unlikely that many physicians or nurses will be dropped. Most separations in the medical department are expected to involve non-professional people.

* * *

Navy Course in Radioisotopes.—Plans are announced for the Navy's ninth course in medical aspects of special weapons and radioisotopes to be held May 22-26, 1950, at National Naval Center, Bethesda, Md. Attendance will be restricted to 200 Naval Reserve medical and dental officers who are not on active duty. Those interested should submit requests for this training duty as soon as possible to the commandant of their naval district. Meals and sleeping quarters will be provided for the enrollees.

* * *

USPHS Allotments.—The annual report of the U. S. Public Health Service just publicized contain interesting and graphically presented data on the physical state of the nation. It contains opinions and prognostications as well as dispassionate statistics. Surgeon General Leonard A. Scheele gives prominence to compulsory Health insurance, although other proposed legislation is described. The USPHS last year spent, allocated or placed under obligation $237,000,000. Researchers at National Institute of Health contributed to the knowledge of eclampsia; inexpensive production of amino acids; protection against septic ulcer; improvements in the prevention and treatment of whooping cough. There were 1,300 researchers in 200 institutions distributed in all but four of the states. Grant-in-aid payments of $47,000,000 were given to the states for venereal disease, tuberculosis and mental health activities.

* * *

Payments Increase.—Michigan's Blue Cross and Blue Shield plans in 1949 upped their payments to hospitals and doctors 52 per cent above the preceding year. Total payments to hospitals and doctors last year came to $32,005,161.09 as compared to payments of $20,944,897.20 in 1948. Michigan Hospital Service, the Blue Cross plan, paid $22,400,967.76 to hospitals in 1949 for services rendered subscribers, and Michigan Medical Service, the Blue Shield plan, paid $9,604,193.33 to doctors for surgical services to Blue Shield subscribers. Blue Shield membership rose 190,000 last year. Michigan persons protected by Blue Cross and Blue Shield now number more than 1,700,000.

* * *

Truman Urges Extension of U. S. Employe Health Program.—A policy statement that President Truman has sent to Federal agencies in the field as well as in Washington is intended to bestir them to establish employe health programs with assistance of U. S. Public Health Service. An act of Congress created this special program three years ago but, with the exception of the Capital itself, the only city where it has been placed in effect is Denver, notwithstanding the fact that about 90 per cent of Uncle Sam's workers are employed outside Washington. The White House directive says "to proceed as soon as possible" in instituting these employe health plans, which call for services of physicians and nurses. Chief requisite is the establishment of health rooms staffed by qualified professional personnel.—WRMS, Feb. 20, 1950.

* * *

Annual Report Depicts Rise of VA's Medical Activities.—Hugeness of Veterans Administration medical program is portrayed statistically in Administrator Carl Gray's annual report, made public last week. For example: Hospital admissions increased from 535,000 to 555,000 . . . average daily patient load was 107,000 . . .

full-time physicians, dentists and nurses on June 30, 1949, totaled 3,883, 950 and 12,437, respectively . . . 75,000 physicians and 57,000 dentists (estimated) participated in providing out-patient services . . . 14,000 beds were allocated for tuberculosis . . . more than 130,000,000 meals were served in veterans hospitals . . . social service workers averaged 106,000 interviews of patients and families each month.—WRMS, Feb. 20, 1950.

* * *

Members of Legislative Committee Listed.—The Legislative Co-ordinating Committee, which was established by the House of Delegates in Washington as an advisory group to the Board of Trustees, held its first meeting in Chicago recently. Dr. Dwight H. Murray, Napa, Calif., a member of the Board, was named chairman. Other members of the committee, appointed by the Board, are: Harvey B. Stone, Baltimore; J. D. McCarthy, Omaha; F. J. L. Blasingame, Wharton, Texas; W. J. Dattelbaum, Brooklyn; *W. H. Huron, Iron Mountain, Mich.,* and Oscar B. Hunter, Washington. The executive committee of the Board of Trustees meets jointly with this committee.

* * *

AMA Membership Gain in 1949.—As of January 1, 1950, the American Medical Association membership stood at 144,212, a gain of 4,171 during the year. The total figure allowed for the 2,179 deaths which occurred during 1949. The number of AMA Fellows at the first of the year was 78,571, a gain of 2,548.

In Portland, Oregon, the trial of the Oregon State Medical Society and the eight county organizations under the Sherman Anti-Trust Act is finished. The courts are now awaiting arguments on briefs from both sides and a verdict is expected probably in the fall.

* * *

United Fund Drive.—In a speech in Washington, March 8, Secretary of Labor Morris Tobin warned that National Voluntary Associations, particularly those in the health field, will find themselves under Government control if they do not pool their money-gathering activities into a single annual campaign.

* * *

In the controversy over Secretary Louis Johnson's order for the closing or curtailment of eighteen Military and Naval Hospitals, Rear Admiral Joel T. Boone, testified that the closing of these hospitals would work a hardship inimical to Army and Navy training programs, and that his Department had not been consulted. The next day he was fired! (The same as Admiral Denfield sometime previously without explanation.)

* * *

Paul B. Magnuson, M.D., Chief Military Director of Veterans Administration, stated that the VA had asked the Department of Defense for use of 5,300 beds in Army and Navy Hospitals to begin July 1, and voiced his doubt that it would be wise for the VA to take over any of the Military Hospitals scheduled for elimination. Upon return to his office, he received Administrator

Say you saw it in the Journal of the Michigan State Medical Society

Carl Gray's order to abolish 4,891 positions in the hospitals, national offices and central offices.

* * *

Blue Cross-Blue Shield.—Delegates to the international Blue Cross and Blue Shield convention were urged to support voluntary health insurance plans in preference to state-controlled programs.

Dr. Paul R. Hawley of Chicago, chief executive officer of the Blue Cross and Blue Shield health insurance agencies, said state medicine does not necessarily mean a higher health standard.

During a round-table discussion, Dr. Hawley was asked why the United States, with the world's highest standard of living, has a health standard below those of Norway, Sweden and Finland. The three Scandinavian countries have compulsory state-medicine plans.

Dr. Hawley replied that, although Swedes, Norwegians and Finns in their own countries live longer than the average American, the Scandinavians live still longer when they move to the U. S., which has no enforced medical plan.

Surveys in Minnesota and North and South Dakota showed that Scandinavians in those states have a longer life span than their countrymen who have remained in their native lands, he said.

Earlier, the Rev. H. Bertrand of Montreal, president of the Catholic Hospital Council of Canada, told the 500 delegates from Canada, the U. S. and Puerto Rico that the state has "no right to enter into competition with any voluntary (health) plan."

"The government's right and duty is to decide that every citizen is to be insured against disability," he said, "but it is also its duty to leave him completely free to join whatever insurance plan he may desire."

Father Bertrand said that a compulsory health plan, preferably provincial but possibly national, is "an excellent thing . . . but the state has not the right to be the agent of such a plan."

William S. McNary, Detroit, has been elected chairman of the Blue Cross Commission, national co-ordinating body of the ninety Blue Cross Plans and their 35,000,000 members.

McNary has been director of the Michigan Hospital Service, the state's Blue Cross Plan, since 1947.

He is a member of the Detroit Board of Commerce, the Rotary Club, the Economic Club of Detroit, the Michigan Hospital Association, the American Hospital Association and the American Public Health Association.

* * *

The general oral and pathology examinations (Part II) of the American Board of Obstetrics and Gynecology, Inc., for all candidates will be conducted at The Shelburne, Atlantic City, New Jersey, by the entire Board from Sunday, May 21 through Saturday, May 27, 1950. Formal notice of the exact time of each candidate's examination will be sent him several weeks in advance of the examination dates.

Candidates for re-examination in Part II must make written application to the Secretary's office not later than April 1, 1950.

Applications are now being received for the 1951 examinations. Application forms and Bulletins are sent upon request made to Paul Titus, M.D., Secretary, American Board of Obstetrics and Gynecology, Inc., 1015 Highland Building, Pittsburgh 6, Pennsylvania.

* * *

MSMS Secretary, L. Fernald Foster, M.D., spoke before the Bay City Baptist Women's Club on February 7, 1950, on the subject of "Compulsory Health Insurance." On February 16, 1950, he spoke at the meeting of the Midland County Medical Society on the subject, "Public Relations."

* * *

J. S. DeTar, M.D., Councilor of the Fourteenth District, has been very active in medical socio-economic circles the past two months. He spoke before the Milan Rotary Club, January 17; the Michigan State Association of Supervisors, Lansing, January 24; the Milan Kiwanis Club, January 26; Capitol Club, Lansing, Feb-

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ruary 6; Ypsilanti Lions Club, February 7; Ann Arbor Business and Professional Women's Club, February 14; Detroit Colony Club, February 15. He participated in the program of the American Academy of General Practice, February 20-23, and presented talks at the Bay County Women's Auxiliary meeting, February 28, and the Livingston County Medical Society meeting, March 4.

* * *

W. G. Gamble, Jr., M.D., Bay City, spoke before the Mount Pleasant Child Study Club on March 1, 1950. His subject was "Newer Hormone Therapy." He also conducted a two-day session at Bay City Central High School where he discussed the relationship of biochemistry, biology and allied subjects to the practice of medicine.

* * *

ACTH and Similar Compounds.—Federal Security Agency reports prospects for a "much larger" quantity of ACTH, cortisone and similar hormonal compounds this year. Meanwhile, FSA has managed to scrape up a sizable scholarship fund for researchers in these compounds, and is asking Congress for more money for the same purpose. . . . FSA moved into the situation when producers of the compounds decided they could no longer continue to furnish them to researchers without charge. Now they are paid cost of production.

RICKETTSIAL DISEASE IN MICHIGAN

(Continued from Page 430)

entertainers who developed symptoms and died following a few days of acute illness. The microscopic demonstration of rickettsia in the tissues obtained at autopsy, in addition to the characteristic pathologic changes in the blood vascular endothelium of small vessels, demonstrates that these cases fall into the group of rickettsial diseases. The final absolute diagnosis which depends upon the isolation of the virus was not accomplished in either of these two cases. The epidemiological background and the distribution of the skin eruption, especially the involvement of the face and scalp, suggest that these cases were examples of Rocky Mountain spotted fever. At the time of death of these two patients Rocky Mountain spotted fever had not been reported in Michigan.

We wish to acknowledge the assistance of the following individuals who attempted unsuccessfully to establish the diagnosis by laboratory methods: Dr. R. R. Parker, Rocky Mountain Laboratory, U. S. Public Health Service, Hamilton, Montana; Dr. T. L. Perrin, U. S. Public Health Service, Bethesda, Maryland; and Dr. Wallace M. Chapman, Michigan Department of Health, Lansing, Michigan.

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THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column, and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.

PRIMER OF ALLERGY. A Guidebook for those who must find their way through the mazes of the strange and tantalizing state. By Warren T. Vaughan, M.S., M.D., Richmond, Virginia. With illustrations by John Tillery. Third edition, revised by J. Harvey Black, M.D., Dallas, Texas. St. Louis: The C. V. Mosby Company, 1950. Price, $3.50.

This book is small and easily carried in the pocket. It gives the very fundamentals of the subject of allergy, and stresses the necessity of the patient's learning to live with his allergy. It discusses the nomenclature, the many special meaning terms, the constitution of the victim, the reactions and tests; also, what to do, the sensitization and methods of combatting it, methods of elimination and final cornering of the allergen. Then follows the problem of therapeutics. The book is full of information and valuable hints.

THE SALT-FREE DIET COOK BOOK. By Emil G. Conason, M.D., and Ella Metz. New York: Lear Publishers, Inc., 1950. Price $3.00.

Salt-free diet has been proven in the treatment of certain conditions relating to the circulatory system: hypertension, liver damage, arteriosclerosis, eclampsia, edema, coronary sclerosis and thrombosis. This book tells of the methods of preparing foods, and gives many sample menus. The various menus give the amount of sodium salt and the calories in different columns. At the end of the book is a comprehensive listing for the diabetic patient who must also avoid salt. Very complete and very usable.

HAROFÉ HAIVRI. THE HEBREW MEDICAL JOURNAL. New York, N. Y.

The appearance of Volume 2, 1949, of *The Hebrew Medical Journal* (Harofé Haivri), concludes the twenty-second year of publication of this bi-lingual, semi-annual journal, edited by Moses Einhorn, M.D.

Written in Hebrew, with English summaries, the Journal is a contribution to the development of Hebrew medical literature and thus facilitates teaching in the newly established Hebrew University-Haddassah Medical School in Israel.

In this issue a detailed article is presented on "Scoliosis" by Samuel Kleinberg, M.D., and Prof. Arnold Kutzinski gives a comprehensive survey on "The Psychopathological Problems of the Jews in Israel."

There is a special section devoted to Historical Medicine which contains three interesting essays: "Medical and Anatomical Terms in the Pentateuch in the Light of Egyptian Medical Papyri" by Prof. A. S. Yahuda; "Jews as Intermediaries of Medicine and Natural Science During the Middle Ages" by Zussmann Munter, M.D.; "Al-Qirqisani's Essay on the Psycho-Physiology of Sleep and Dreams by Dr. Leon Nemoy.

Under the heading of "Personalia" there are several articles paying tribute to Dr. Solomon R. Kagan on the occasion of his sixtieth birthday. Dr. Kagan is a well-known authority on Jewish medicine, medical biography and bibliography.

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THE JOURNAL
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VOLUME 49 MAY, 1950 NUMBER 5

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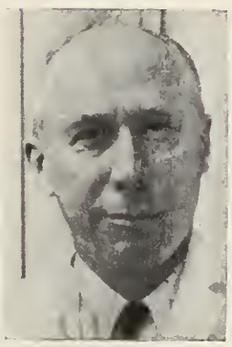

M. A. BLANKENHORN

M. R. BURNELL

J. DE PREE

E. A. HAND

R. B. KENNEDY

H. A. LICHTWARDT

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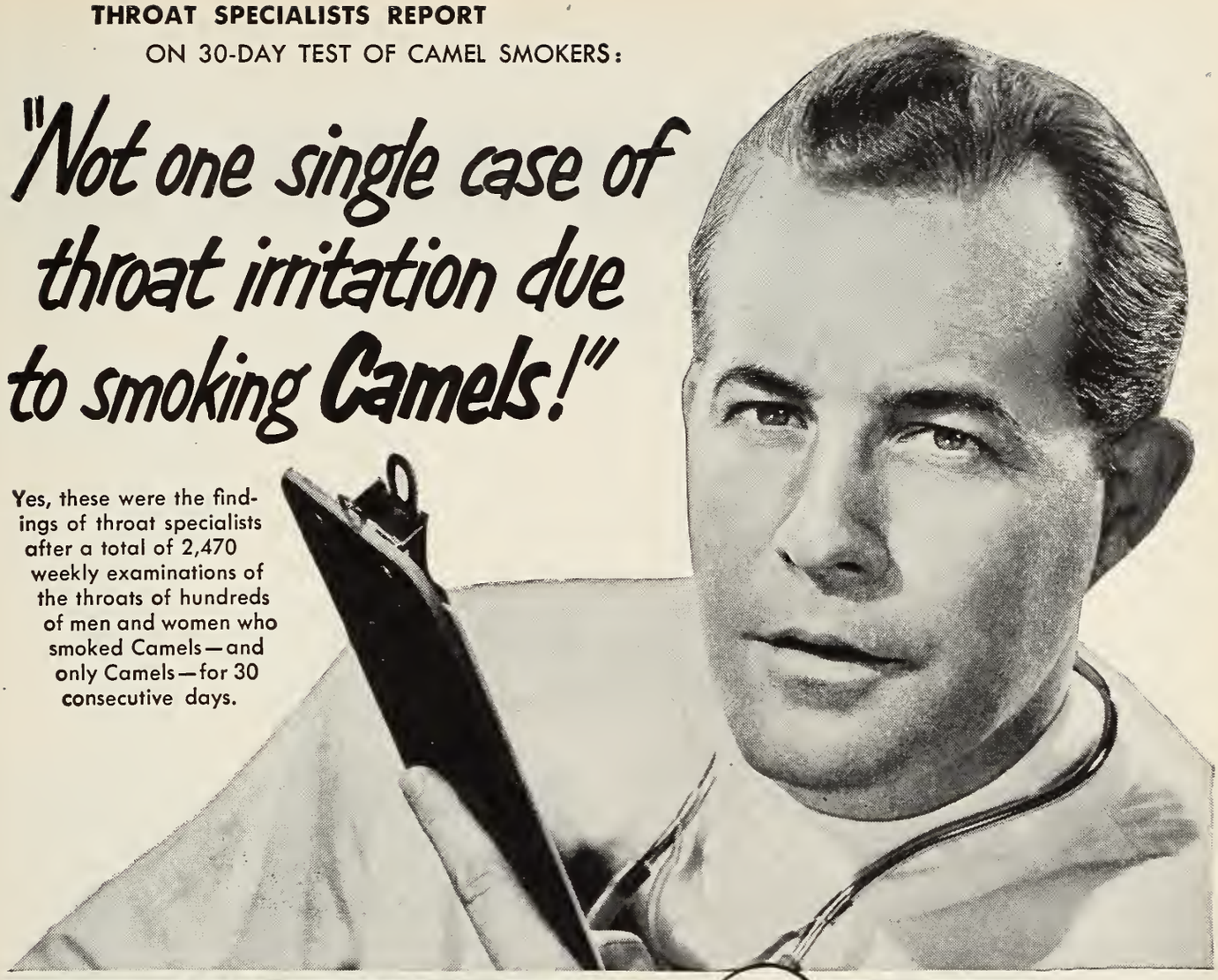

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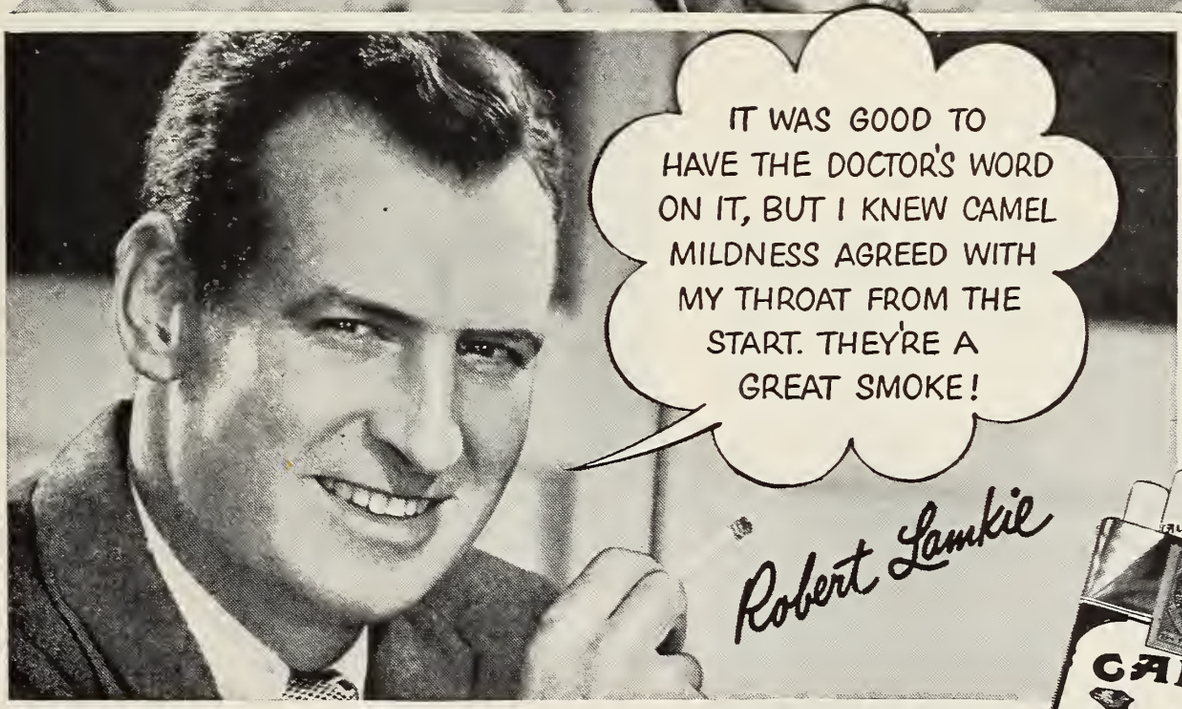

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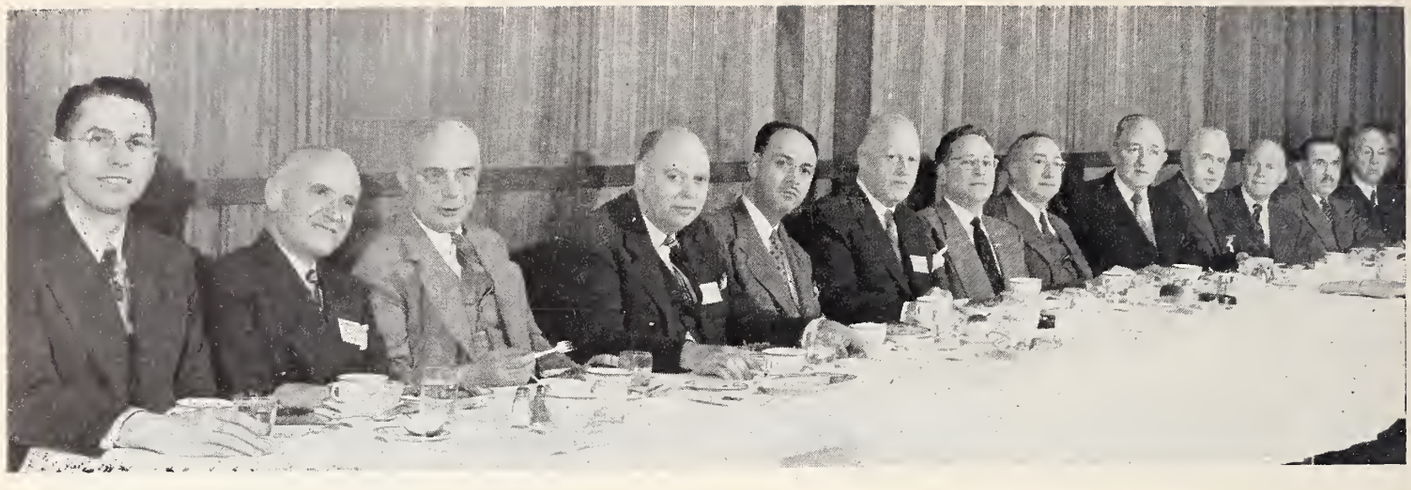


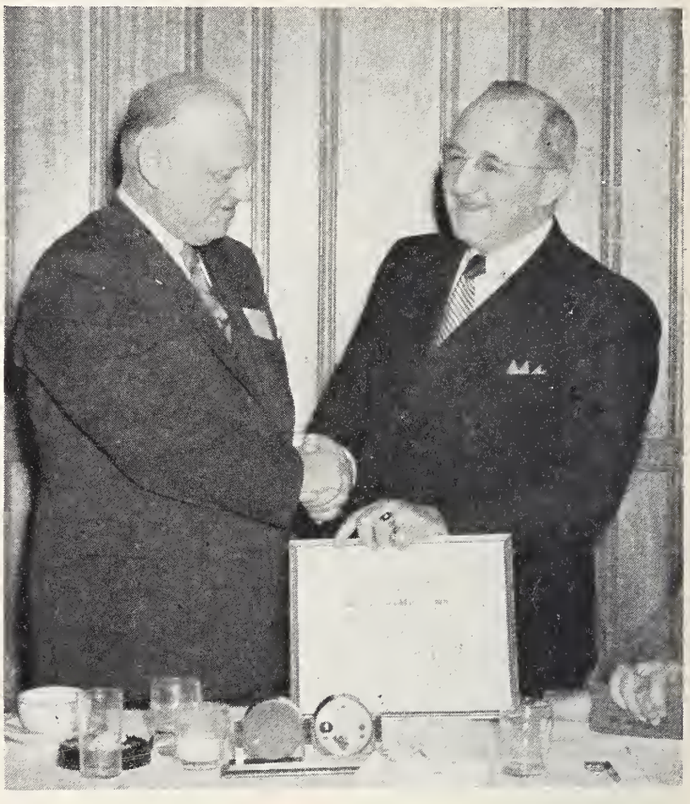
Speakers' table at Industrial Health Day Banquet honoring A. H. Whittaker, M.D., Detroit, President of the American Association of Industrial Physicians and Surgeons.

Left to right: A. E. Heustis, M.D., Lansing, Frank Griffin, M.D., Toronto, Canada, Carl E. Badgley, M.D., Ann Arbor, E. C. Holmblad, M.D., Chicago, Joseph L. Zemens, M.D., Detroit, A. H. Whittaker, M.D., Detroit, E. A. Irvin, M.D., Detroit, John A. Schindler, M.D., Monroe, Wisconsin, C. E. Umphrey, M.D., Detroit, Max R. Burnell, M.D., Detroit, A. C. Furstenberg, M.D., Ann Arbor, G. H. Scott, Ph.D., Detroit and H. J. Pyle, M.D., Grand Rapids.

A.A.I.P.S. President A. H. Whittaker, M.D., Honored at Michigan's First Industrial Health Day

Approximately one hundred outstanding industrial surgeons and physicians gathered in Ann Arbor, March 29, on the occasion of the first Michigan Industrial Health Day. The March meeting was sponsored by the Michigan Association of Industrial Physicians and Surgeons and the Michigan State Medical Society along with the University of Michigan Medical School and School of Public Health, the Wayne University College of Medicine and the Division of Industrial Health of the Michigan Health Department.

A. H. Whittaker, M.D., Detroit, President of the American Association of Industrial Physicians and Surgeons, accepts combination clock-barometer presented by Joseph L. Zemens, M.D. (left), President of the Michigan Association, on behalf of its membership.



A. H. Whittaker, M.D. (left), honored guest, thanks C. E. Umphrey, M.D., President-elect of the Michigan State Medical Society, for the illuminated scroll presented by the State Society to the President of the American Association of Industrial Physicians and Surgeons.

Considerable credit for the success of this initial meeting was due to the excellent arrangements made by co-chairmen Joseph L. Zemens, M.D.,

(Continued on Page 510)

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Two Hundred Forty-six Attend Coller Testimonial Dinner

F. A. Coller, M.D.

The testimonial dinner in honor of Frederick A. Coller, M.D., of Ann Arbor, President of the American College of Surgeons, on March 10, 1950, in Detroit was attended by 246 of his medical friends, associates and former students. President Coller, who is Professor of Surgery and chairman of the Department of Surgery in the Medical School of the University of Michigan, was feted at the Detroit Athletic Club. In addition to many words of praise from those present, hundreds of telegrams were received, many of which were read by the toastmaster, Grover C. Penberthy, M.D., Detroit, who acted as chairman of arrangements for the testimonial dinner.

Philip D. Wilson, M.D., New York City, Clinical Professor of Orthopedic Surgery, College of Physicians and Surgeons, Columbia University, presented a scientific address on "Osteoid Osteoma—An Intriguing Pathological Entity" as a fitting conclusion to a day dedicated to honoring one of Michigan's most illustrious medical men.

A sterling silver after-dinner coffee service was presented by those attending the dinner to Dr. Coller; in addition a scroll was presented to him by the Michigan State Medical Society reading:

"This token is presented by the Michigan State Medical Society to Frederick Amasa Coller, M.D., President, American College of Surgeons, 1949-50, in deep appreciation and grateful recognition of distinguished service rendered to Medicine, medical education and research."

The scroll was signed by W. E. Barstow, M.D., President, and L. Fernald Foster, M.D., Secretary.

A.A.I.P.S. PRESIDENT A. H. WHITTAKER, M.D., HONORED AT MICHIGAN'S FIRST INDUSTRIAL HEALTH DAY

(Continued from Page 508)

Detroit, President of the Michigan Association of Industrial Physicians and Surgeons, and Max R. Burnell, M.D., Detroit, chairman of the Industrial Health Committee of the Michigan State Medical Society. The members of the Committee on Arrangements and Program were: E. A. Irvin, M.D., Detroit, chairman; T. I. Boileau, M. D., Detroit, W. A. Dawson, M.D., Detroit, J. M. Lynch, M.D., Lansing and C. D. Selby, M.D., Ann Arbor.

President of the American Association of Industrial Physicians and Surgeons, Alfred H. Wittaker, M.D., Detroit, was the honored guest at the evening banquet in the Allenel Hotel which closed the all-day session. Dr. Whittaker received a beautiful gift from the members of the Michigan chapter of the Association, and C. E. Umphrey, M.D., Detroit, President-elect of the Michigan State Medical Society, presented him with an illuminated scroll on behalf of the State Medical Society.

Indicative of the laymen's interest in industrial medicine was the attendance of representatives of two Detroit daily newspapers who reported at length on the meeting. Outstanding clinical discussions were centered around the two panels which treated the problems of "Medical Problems of the Older Age Group in Industry" and "Ambulatory Surgery in Industry." Moderators for the panels were H. Marvin Pollard, M.D., and Carl E. Badgley, M.D., both of Ann Arbor.

Featured speaker at the evening banquet was John A. Schindler, M.D., Department of Internal Medicine, Monroe Clinic, Monroe, Wisconsin, who spoke on "Old Age—An American Problem." E. A. Irvin, M.D., Detroit, Vice President of the American Association of Industrial Physicians and Surgeons, presided as toastmaster.

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HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of March 10, 1950

- Monthly financial reports, including detailed breakdown of the Public Education Account and of the Public Education Reserve Account—with comparisons to receipts and expenditures in the same month last year—were presented, studied, and approved.
  Bills payable for the current month were presented and approved.
- Treatment of burns. A special committee of The Council was appointed to study the matter of treatment of burns: Grover C. Penberthy, M.D., Detroit, chairman; R. H. Baker, M.D., Pontiac, H. M. Bishop, M.D., Saginaw, C. W. Colwell, M.D., Flint, and W. H. Steffenson, M.D., Grand Rapids.
- E. L. Henderson, M.D., who in September will be President of the American Medical Association, has accepted an invitation to attend the MSMS Annual Session, Book-Cadillac Hotel, Detroit, on the dates of Tuesday, September 19 (for final meeting of House of Delegates) and Wednesday, September 20 (for first day of Scientific Session), according to report given by the Secretary.
- Procedure for the MSMS Mediation Committee was discussed with Chairman W. Z. Rundles, M.D., Flint. The committee is being guided by forms and procedures developed by the MSMS Legal Counsel.
- J. N. Asline, M.D., Bay City, James Cole, M.D., Highland Park, and Leonard M. Gaydos, M.D., Detroit, were authorized to attend, as representatives of the Michigan State Medical Society, a school on "Treatment of Radiologic Burns" at Western Reserve University, Cleveland, the week of April 2.
- The report of Past President E. F. Sladek, M.D., re his attendance at meetings of the Associated States Postgraduate Committee, National Conference on Medical Service, and Annual Congress on Medical Education and Licensure, in Chicago in February, were received and approved.
- University of Michigan Medical School Centenary. Recognition of this event, in the year 1950, was authorized by the Executive Committee, both by special features in JMSMS and at the MSMS Annual Session in Detroit next September.
- Harry F. Becker, M.D., Battle Creek, chairman of the MSMS Committee on Emergency Medical Service, was authorized to be the MSMS representative at the meeting of the Council on National Emergency Medical Service of the AMA in Chicago, April 22.
- The appointment of J. A. Cowan, M.D., Lansing, to the MSMS Venereal Disease Control Committee and of John E. Manning, M.D., Saginaw, to the Public Relations Committee, as made by President W. E. Barstow, M.D., were confirmed by the Executive Committee.
- The monthly reports of the President, the President-Elect, the Secretary, The Editor, and the Legal Counsel were presented and approved.
- Committee reports were presented from the Commission on Healing Arts (meeting of March 7); Maternal Health Committee (meeting of February 7). The Cancer Control Committee's budget for the year 1950 was presented and approved.

HEALTH PERSONNEL FOR OVERSEAS

To meet the increasing demand for experienced health personnel to staff technical health missions overseas which have been authorized by Congress, the Division of International Health, Public Health Service, is developing an intensive recruiting program.

Opportunities for overseas assignments in the higher grades are expected to develop for a number of physicians, scientists, health educators, sanitary engineers, sanitarians, nurses, administrators, and technicians. Some of the projects will involve employment by the Public Health Service and some will involve employment by the World Health Organization.

Members of technical health missions can assist foreign governments in establishing public health training, initiate health demonstrations, supervise specific projects, and serve in an advisory capacity to foreign government officials on health matters.

The various overseas health missions of the United States have been authorized by Congress with a view to strengthening mutual understanding between the people of the United States and the people of other countries.

(Continued on Page 514)

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HEALTH PERSONNEL FOR OVERSEAS

(Continued from Page 512)

Such missions offer a challenge to American health experts to co-operate with the other people of the world in the development of human resources, as well as an opportunity to broaden their own medical and personal horizons.

Recruitment will be limited to highly qualified personnel possessing both expert knowledge in their technical specialties and the ability to inspire co-operation in a constructive program directed toward broad improvements in public health and the general advancement of human relationships.

Assignment will be made in the higher grades. Additional compensation will be provided in the form of allowances for overseas service.

Qualified health personnel may obtain application forms and further details concerning opportunities to participate in these programs by writing to the Chief, Division of International Health, Public Health Service, Federal Security Agency, Washington 25, D. C.

SURVEY OF PHYSICIANS' INCOMES

Late in April, the Bureau of Medical Economic Research of the American Medical Association and the Office of Business Economics of the U. S. Department of Commerce jointly conducted a survey of physicians' incomes.

The Bureau was authorized by the AMA Board of Trustees to co-operate in this survey, which the Department of Commerce had planned to conduct alone. This is the first full-scale survey by the department of physicians' incomes since 1941.

An analysis of the results will be published by the Department of Commerce next fall in its monthly publication, *Survey of Current Business*. Its August, 1949, and January, 1950, issues had published similar analyses of surveys of incomes of dentists and lawyers, respectively, made jointly with American Dental Association and the American Bar Association.

There is evidence that the national averages in some surveys have been too high because physicians who do not have bookkeepers to fill out questionnaires do not reply in sufficient numbers. Accordingly, the Bureau emphasizes the importance of all doctors, especially those with a relatively small practice, filling out the questionnaires.

Accurate postwar data on physicians' incomes is badly needed in order to develop better estimates of how much the American people pay to physicians.

Every physician can be assured that the survey has no relation whatever to the operations of the U. S. Bureau of Internal Revenue. There is no way by which the Department of Commerce could have obtained the needed information from the Bureau of Internal Revenue; hence, the questionnaire survey.

There are two questionnaire forms. The Bureau of Medical Economic Research helped to design these. The short form requests income data for 1949 only. The long form questionnaire covers the years 1945 through 1949. All are to be returned unsigned in franked envelopes.

The punch card files of the Bureau of Medical Economic Research contain the names of about 200,000 physicians. The survey covers 125,000 of these, or 62.5 per cent of the total. Selection was made by a formula which eliminates any partiality.

A short form was sent once only to *every other* name in the file. Of the remaining 100,000 names, every fourth was selected. To these went 10,000 short forms and 15,000 long forms, with this distinction—the return franked envelopes carry a code number which identifies the physician to the Bureau of Medical Economic Research alone. All of the addressing was done in the headquarters of the AMA.

The sole purpose of the code number is to enable the Bureau of Medical Economic Research to address a follow-up letter to those not replying to the first request. Physicians need have no suspicion about the code number because when the reply is received, the questionnaire will be separated immediately from the envelope and the identity will be lost.

Physicians will be doing the medical profession a service by filling out the forms and returning them as soon as possible.

NATIONAL INSURANCE

National insurance is $220,000,000,000. The net gain has been 20 billions. Let us listen to the socializers and divide this net gain. It would mean less than $150 for every man, woman and child. Shall we sell our country into socialism for less than $150.00?

NAM OPPOSES DISABILITY CLAUSE

The National Association of Manufacturers and United Auto Workers (CIO) are in sharp conflict on many points of the social security bill, but agree on one basic issue: Both believe benefits should be extended to every worker who can constitutionally be brought under the act.

Appearing before the Senate Finance Committee, Ira Mosher made the case for NAM and Walter Reuther, president of UAW, stated the union's views. Mr. Mosher's thesis was that benefits constantly should be regarded as a "basic minimum layer of protection," and that workers should be encouraged in every way to save and to participate in private pension systems. He said NAM believes the payroll tax should not be increased, and that deductions should stop with the first $3,000 of annual income, as at present.

On permanent and total disability, Mr. Mosher said: ". . . we believe it to be extremely unwise to carry on that kind of a program on a Federal basis . . . Since in some cases the sole basis for determination of disability is a subjective one, it is easy to envision the many abuses that are bound to result." He also emphasized the "tremendous" cost, estimated at one billion dollars a year within 15 years. Mr. Reuther claimed that administration of a permanent and total disability program was feasible, citing as evidence the testimony of the

(Continued on Page 516)

The Protein-Rich Breakfast and Morning Stamina

Extensive studies* by the Bureau of Human Nutrition have established that breakfasts rich in protein and supplying 500 to 700 calories, effectively promote a sense of well-being, ward off fatigue, and sustain blood sugar levels at normal values for the entire morning postbreakfast period.

These physiologic advantages are related mainly to the protein content rather than to the caloric content of the breakfast. In fact, when isocaloric breakfasts were compared, those with the higher amounts of protein led to the greatest beneficial effects. Breakfasts providing the lower quantities of protein (7 Gm., 9 Gm., 16 Gm., and 17 Gm. respectively) produced a rapid rise in the blood sugar level and a return to normal during the next three hours. Breakfasts providing more protein (22 Gm. and 25 Gm. respectively) produced a maximal blood sugar rise which was lower than that following the breakfasts of lower protein content, but the return to normal was delayed beyond the three hour period.

The subjects on the higher protein breakfasts "reported a prolonged sense of well-being and satisfaction." The findings indicated that the beneficial effects of the high protein breakfast on the blood sugar level may extend into the afternoon.

Meat, man's preferred protein food, is a particularly desirable means of increasing the protein contribution of breakfast. The many breakfast meats available are not only temptingly delicious and add measurably to the gustatory appeal and variety of the morning meal, but they also provide biologically complete protein, B-complex vitamins, and essential minerals. *Meat for breakfast, a time-honored American custom, is sound nutritional practice.*

---

*Orent-Keiles, E., and Hallman, L. F.: The Breakfast Meal in Relation to Blood-Sugar Values, Circular No. 827, United States Department of Agriculture, Bureau of Human Nutrition and Home Economics, Agricultural Research Administration, Dec., 1949.

The Seal of Acceptance denotes that the nutritional statements made in this advertisement are acceptable to the Council on Foods and Nutrition of the American Medical Association.

ACCEPTED COUNCIL ON FOODS AND NUTRITION AMERICAN MEDICAL ASSOCIATION

American Meat Institute

Main Office, Chicago...Members Throughout the United States

NAM OPPOSES DISABILITY CLAUSE

(Continued from Page 514)

social security administrator, Arthur J. Altmeyer, and the conclusions of the Advisory Council on Social Security. He described as a "pessimistic prophecy" the criticism that the program would encourage malingering by patients, but he did not offer specific evidence on this point. Mr. Reuther would go beyond the present bill and establish a program for temporary disability with benefits of $30 and $45 per week.

OUR ECONOMY?

Let's quit calling ours a capitalistic system. Let us call it a profit and loss system. There is nothing wrong with it. The only countries that can closely approach us are ones who have adopted our system of enterprise and incentive, or are proceeding on money and men they have "borrowed" from us.

WHAT OTHERS ARE SAYING

"How is the National Health Service working out?" is one of the first questions a foreigner will put to a British doctor. The usual answer is "It is far too early to say." In any case the British doctor is so deeply emersed in it, and incidentally so over-worked, that he is little inclined to concern himself with the generality of things; the particular overwhelmingly engrosses him. The extra number of the *Practitioner,* just published, has therefore, performed a timely service in attempting to review the "first year's working." This it does in a series of articles, the value of which is somewhat diminished by the fact that they are anonymous. This in itself is important. Men working in a "service" hesitate to put their names to anything in a nature of a criticism of it. The same tendency may be seen in the correspondence columns of this Journal. The real danger of a service in which men and women are employed by the State—or, at least, paid by the State—is that they will tamely acquiesce in things that they dislike, or hesitate to put their names to forthright criticism. This may lead, in Medicine, to a sapping of that essential of democracy—free discussion. The editor of the *Practitioner* considers that anonymity is essential "when the chief concern is that writers should speak their mind with complete freedom, uninfluenced by the desire to please their friends or placate their enemies, to escape the labels of 'traitor' or 'reactionary,' and when, as in several instances in this number, the article is a symposium embodying the views of several men." It is a sad and sorry comment on Medicine today to admit that only under the cloak of anonymity it is possible to speak the mind with the complete freedom on what the same editorial describes as "one of the greatest ventures in the history of medicine."—Editorial, *British Medical Journal,* October 1, 1949, entitled, "A Year of N.H.S."

TAX FACTS

Taxes are high—we know that—but it is a bit shocking to discover just how high they are. In 1945, in the midst of a global war with 11 million men under arms, the Nation's total tax bill—Federal, State, and Local—was some $52,500,000,000. In 1949, the revenuer's take was up to some $55 billion, more than the entire national income in 1932, 1933, or 1934, and some 25 per cent of the entire national income. The U. S. budget which was about $3 billion in 1929, has arisen to $43,500,000,000. In 1949, the Federal Government spent an amount equal to the incomes of all persons west of the Mississippi River.

Hidden Taxes

One of the things on which most of us are not so clear is the source of government tax income. Because only half of the Federal revenue and less than 10 per cent of state and local revenue is derived from the direct taxation of personal income, the hidden tax burden on nine out of every ten taxpayers—those with incomes of $5,000 or less—is heavier than the income tax. The Tax Foundation, student of government expenditures and taxes, has discovered at least 100 taxes on a dozen eggs, 116 on a man's suit of clothes, 150 on the manufacture and sale of a woman's hat, and 151 on a loaf of broad. Every pack of cigarettes carries an 11½ cents tax burden; every $2,000 automobile a load of $300 to $500.

Why High Taxes?

The present tax burden is necessitated by big government and the bureaucracy which it supports. The Federal Government presently occupies floor space equal to 170 Empire State Buildings 102 stories tall, and employs more than 2,000,000 persons on its payroll. An area equivalent to 6 Pentagon Buildings is required merely to store its records.

That this big, sprawling government is inefficient has been vividly and undeniably highlighted by the recent Hoover Commission report. To buy onions the Army puts an order through 288 separate steps; messengers handle the order some 110 times. The Veterans Administration Insurance Service has a work load of 450 policies per employe while the work load of the private insurance company is 1,762 policies—four times as heavy. The Army has been able to locate only 16,000 of 25,000 tanks theoretically on hand at the end of the war. Eighty-three out of every hundred veterans admitted to government hospitals are suffering from non-service connected ailments. It takes Army personnel some 16.1 days to recover from a tonsillectomy, while the average stay in a private hospital is 1.4 days. Our State Department takes as many as 35 steps to process a letter. —*Bulletin, American College of Radiology,* February, 1950.

PROPOSED CIO POLICY STATEMENT ON VOLUNTARY PREPAID MEDICAL PLANS

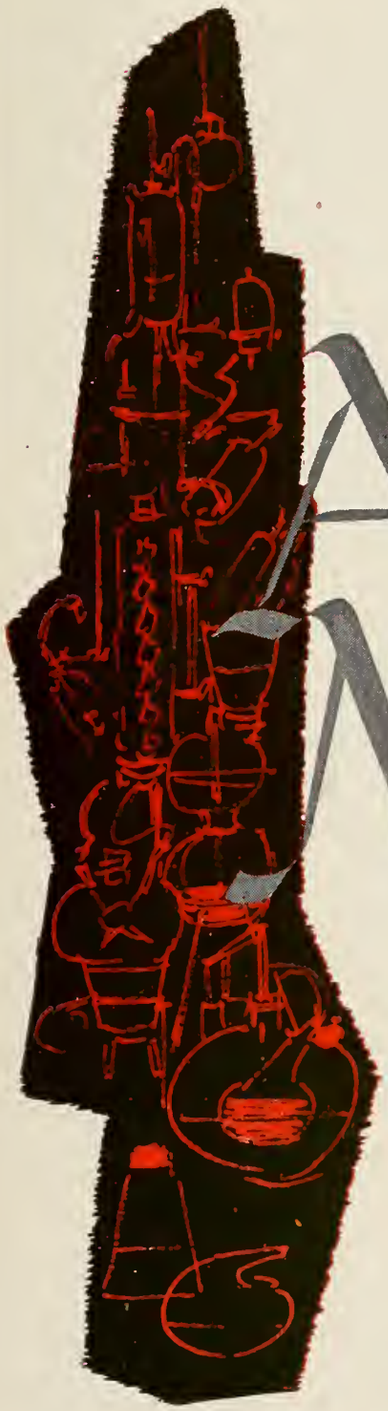
Pending the establishment of an adequate national health program it is necessary for Labor to utilize various types of voluntary prepaid medical plans, including commercial insurance and medical-society-sponsored Blue Shield plans. Most of these voluntary plans are unsatisfactory because of limited scope of services available, high operating costs, limited or no public or labor representation on policy boards, restrictive protection (because benefits are cash indemnity rather than a

(Continued on Page 518)

AUREOMYCIN HYDROCHLORIDE LEDERLE

in Rickettsial Infections

The discovery of aureomycin marked an epoch in antibiotic specific therapy. The rickettsiae, lying midway between the bacterial and the viral infections are immediately inhibited or killed by this antibiotic. Rocky Mountain spotted fever, Q fever and typhus fever all respond dramatically to aureomycin, without reference to the stage of the disease at which therapy is begun. The ability of this agent to penetrate the cell membranes and attack the intracellular rickettsiae is an important factor in producing its highly specific effect.



AUREO-MYCIN

Aureomycin has also been found effective for the control of the following infections: African tick-bite fever, acute amebiasis, bacterial and virus-like infections of the eye, bacteroides septicemia, boutonneuse fever, acute brucellosis, Gram-positive infections (including those caused by streptococci, staphylococci, and pneumococci), Gram-negative infections (including those caused by the coli-aerogenes group), granuloma inguinale, *H. influenzae* infections, lymphogranuloma venereum, peritonitis, primary atypical pneumonia, psittacosis (parrot fever), Q fever, rickettsialpox, Rocky Mountain spotted fever, subacute bacterial endocarditis resistant to penicillin, tularemia and typhus.

Capsules: Bottles of 25, 50 mg. each capsule.
Bottles of 16, 250 mg. each capsule.
Ophthalmic: Vials of 25 mg. with dropper; solution prepared by adding 5 cc. of distilled water.

LEDERLE LABORATORIES DIVISION
AMERICAN Cyanamid COMPANY
30 Rockefeller Plaza, New York 20, N. Y.

CIO POLICY STATEMENT

(Continued from Page 516)

guarantee of necessary medical service), prohibitions against group practice, and lack of provision for strengthening quality of medical services.

It is, therefore, the policy of CIO that voluntary prepaid medical plans should meet the following standards as a condition for utilization by organized Labor:

1. Prepaid medical plans should assure that services needed by the worker or his family will be provided in accordance with medical needs and not on a cash indemnity basis. Payments under the plan must be accepted by physicians as full payment for services rendered. This requires acceptance by groups of physicians of fee schedules for full payment of their services which should not be more than the amounts usually paid by such governmental agencies as Veterans Administration.
2. Labor and other consumer groups must be adequately and effectively represented on the policy making boards of prepaid medical care plans.
3. These plans must maintain minimum operating expenses and follow efficient administrative practices.
4. The plans must assure free choice of physicians or of groups of physicians who are associated in prepaid group medical practice.
5. The plans must provide for enforcement of high standards of care and continuous improvement of quality of care.

Published to give our members a forecast of Labor's demands in considering medical prepayment plans.

BLUE SHIELD

There are now sixty-eight "Doctors' Plans" which offer the public non-profit prepaid medical care protection against the cost of medical care. The coverage of these plans includes practically the entire United States.

A national association of these plans, incorporated under the laws of Illinois, has functioned during the past five years under the title "Associated Medical Care Plans, Inc." At the recent meeting of the Association at Montreal the attorney of the organization was instructed to amend the charter changing the title to "Blue Shield Medical Care Plans, Inc." Thus, on the national level, Blue Shield becomes the symbol of non-profit medical coverage, just as Blue Cross stands for hospital service.

A "Blue Shield Commission" consisting of members representing the various districts of our nation, functions much as the Comitia Minora of a County Medical Society or a Council of a State Medical Society. The Commission carries on the business of the Association between the meetings of the national assembly or representatives of the 68 plans.

To meet the needs of employers and others who have employes located in more than one local plan area, a stock company is being incorporated. It will be operated upon a non-profit basis, and it will supplement, not compete with, local plans. The Blue Cross Commission has organized a similar company to serve the needs of the Blue Cross Association. Provision for the joint operation of the two companies is in process of preparation.

Blue Shield and Blue Cross offer the people of America a voluntary way of spreading the cost of doctor and hospital service. A system free of the excessive costs and wastes of bureaucracy and free of the controls which restrain personal liberty under the "compulsory system" of foreign lands. This American way is rapidly demonstrating that it is the practical way—the choice of a people who want to remain free.—*U.M.S. Bulletin*, March, 1950.

DEFINITIONS

Most of us are familiar with the cow story. It has recently been brought up to date.

CAPITALISM: If you have two cows, you sell one and buy a bull.

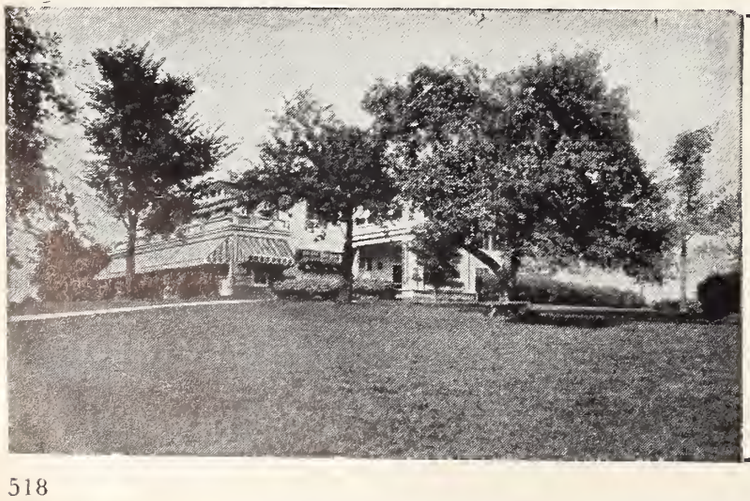
SOCIALISM: If you have two cows, you give one of them to your neighbor.

COMMUNISM: If you have two cows, you give them to the government and the government gives you the milk.

FASCISM: If you have two cows, you keep the cows and give the milk to the government.

NEW DEAL: If you have two cows, you shoot one, milk the other, then pour the milk down the drain.

FAIR DEAL: If you have two cows, you let them starve so you can buy your milk in cans, thus making business better.



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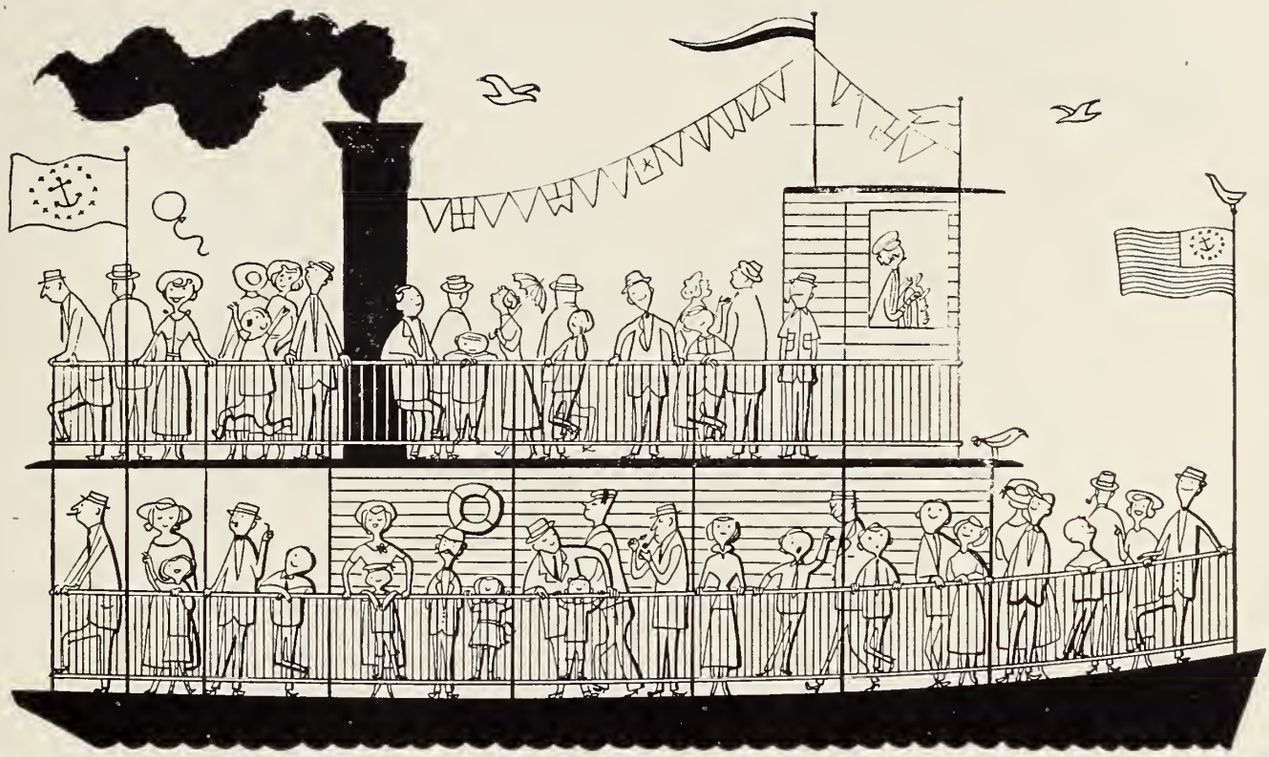

It would take a small excursion boat

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● More than 44 clinical uses for short-acting NEMBUTAL have been reviewed in the literature during the 20 years the drug has been effectively used. Some of these uses may be applicable in your own practice.

With short-acting NEMBUTAL, doses adjusted to the need can provide any degree of cerebral depression—from mild sedation to deep hypnosis. Dosage required is only about *one-half* that of certain other barbiturates. Because there is less drug to be eliminated, there is less possibility of barbiturate hangover and wider margin of safety.

You'll find short-acting NEMBUTAL available in the form of Nembutal Sodium, Nembutal Calcium and Nembutal Elixir, all in convenient small-dosage preparations. Write for handy booklet, "44 Clinical Uses for Nembutal."
ABBOTT LABORATORIES, North Chicago, Ill. Abbott

In equal oral doses, no other barbiturate combines QUICKER, BRIEFER, MORE PROFOUND EFFECT than

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Political Medicine

TRUMAN CERTAIN TO STUMP FOR NATIONAL HEALTH PLAN

Washington—One of President Truman's principal issues on his 15-state autumn campaign for Fair Deal Democratic congressmen will be his multibillion-dollar health insurance plan.

A great number of lawmakers are convinced that the present Congress will not act on the program despite Mr. Truman's urgent recommendation.

The President has said he will campaign for it.

"Not a chance for it in this session," says Rep. Mason (R., Ill.), a member of the Ways and Means Committee. He reflects what appears to be a majority sentiment of the members.

Mr. Truman and the Federal security administrator, Oscar R. Ewing, insist that their plan is "the democratic way." Since Ewing says not one objecting physician in 10 understands the Administration bill, here is an outline of what it would provide:

1. Prepaid health insurance, including medical, surgical, dental and hospital care and home nursing on a social-security basis similar to old-age pensions. Uninsured needy persons would be cared for through Federal and state appropriation.
2. Decentralized administration by the states, Federally financed, on plans passed by the legislatures. These would be subject to approval by a five-member national health insurance board. The board members would serve six-year terms at $12,000 a year.
3. Federal financial aid to schools and universities teaching medicine, surgery dentistry and nursing on a large scale.
4. Federal subsidies for all forms of medical research, including hygiene and administration, expanded well beyond present financial aid.
5. Larger Federal appropriations for building hospitals, clinics and other needed facilities.
6. Grants to the states for scholarships, city and rural administration, health and hygiene services and preventive medicine.
7. Grants to states for childlife research and maternal aid.

What the program would cost is not set forth in the bill, which is sponsored by Democratic Senators Thomas, of Utah; Murray, of Montana; Pepper, of Florida; Chavez, of New Mexico; Taylor, of Idaho; and Humphrey, of Minnesota.

Estimates of the costs, however, run well into the billions.

Ewing believes that a payroll tax of 3 per cent—1½ per cent paid by employers and 1½ per cent by employes—on wages up to $4,800 would be ample. He figures $4,500,000,00 a year would be needed at the start.

"That would be no new burden on the economy," says Ewing. "It would be merely a different way of collecting and paying for better health."

Congressional critics say that Ewing's estimate would be only a drop in the bucket to what the system, if fully enacted, actually would call for.

Health insurance payroll taxes would be collected in addition to old-age pension payments which are 3 per cent now and scheduled to go to 4 per cent.

Insured persons would be eligible for benefits after about 18 months of payroll tax payments.

They would be assured full freedom in choice of doctors, dentists and nurses, who in turn could accept or reject patients after signing up under the plan.

Regulations to be worked out later would specify rates of payment to hospitals and professional people for their services.

In order to encourage a large increase in the number of doctors, dentists and nurses, schools providing those degrees or courses would be subsidized by the Treasury.

They would get from $150 to $350 for each student enrolled up to their annual average, and from $800 to $2,400 for each student enrolled over that average, depending on the courses taken.

—Signed article by Paul B. Leach displayed as streamer across the top of a page of the *Detroit Free Press,* Sunday, February 26, 1950.

H. J. RES.403 ALASKAN WELFARE PROGRAMS

Mr. Bartlett, of Alaska, January 24, introduced a bill to authorize special emergency assistance for welfare programs for Alaska, and for other purposes. This was referred to the Committee on Public Lands.

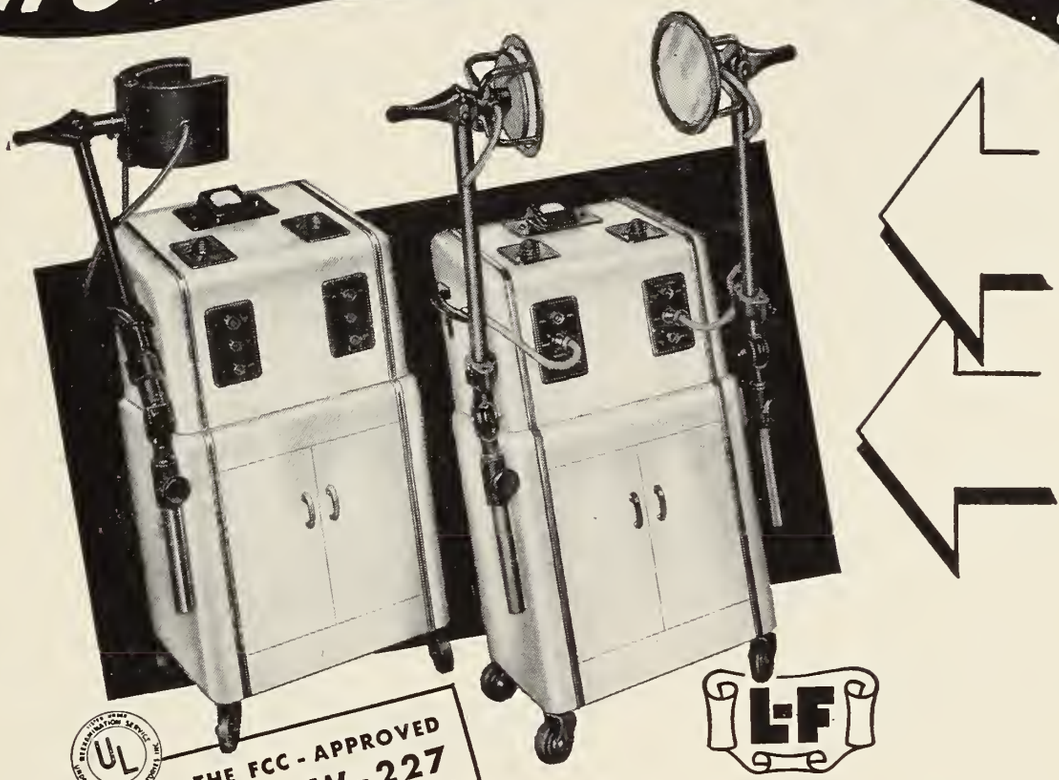
Comment: This would appropriate such funds as may be necessary for five years to extend, improve, and develop maternal and child services, crippled children's services, and child welfare services in Alaska through grants, *in addition* to those allotted under the Social Security Act, without financial participation by Alaska. Would also provide funds for assistance to needy persons, including cash payments, medical care, and transportation; and further funds for vocational rehabilitation services to disabled Alaskans; and that all such programs would be administered by the Social Security Administrator.

S.2978 MEDICAL CARE FOR GOVERNMENT EMPLOYES

Mr. Langer, of North Dakota, February 2, introduced a bill to make available medical and hospital treatment to certain individuals who have had a minimum of ten years' service as civil officers or employes of the Federal

(Continued on Page 524)

IT'S THE Same DIATHERMY!



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Michigan Postgraduate Clinical Institute

The registration at the 1950 Institute in Detroit totaled 1,875. The break-down follows:

Doctors of Medicine	1,402
Exhibitors	219
Guests	254
Total	1,875

This total represents an increase of 248 over the registration of 1949.

At the first Annual Michigan Heart Day held on Saturday, March 11, at the Book-Cadillac Hotel, Detroit, three hundred seven physicians were registered. This expression of interest insures a continuation of the Heart Day by its sponsor, the Michigan Heart Association.

Out-of-Michigan doctors of medicine who registered included physicians from Connecticut, Illinois, Indiana, New York, Ohio, Ontario, and Quebec.

A total of over 32,000 lines of publicity appeared in Detroit and Michigan newspapers in connection with the 1950 Michigan Postgraduate Clinical Institute.

Registration of Doctors of Medicine from Out of Michigan

Connecticut—Chester Phillipson, New Haven.

Illinois—P. R. Hawley, Chicago; A. J. Kappert, Evanston.

Indiana—J. A. Alford, Hamilton; H. H. Ash, West Lafayette; J. C. Baumgartner, Fort Wayne; F. A. Brydn, Fort Wayne; J. E. Burks, Crawfordsville; J. J. Hartman, Angola; D. G. Mason, Angola; F. L. Schoen, Fort Wayne; T. G. Sheller, Argos.

New York—F. J. Lewy, New York; H. W. Meyer, New York; G. M. Wheatley, New York; J. S. Wolff, Jr., Corning.

Ohio—D. R. Barr, Grand Rapids; J. D. Cameron, Defiance; B. B. Caplan, Columbus; I. R. Cohn, Toledo; H. D. Cook, Toledo; L. M. Dolloway, Toledo; H. F. Drygas, Oberlin; F. M. Flock, Windsor; J. E. Gorman, Windsor; F. C. Henry, Berlin Heights; W. G. Henry, Toledo; H. B. Lehnert, Toledo; H. G. Lehrer, Sandusky; E. R. Murbach, Archbold; B. D. Osborn, Waldo; A. B. Price, Cleveland; B. H. Schulak, Toledo; R. F. Schultz, Kenton; E. J. Singer, Toledo; P. N. Squire, Sandusky; Gerald Stark, Toledo; O. H. Stonne, Toledo; R. B. Walker, Toledo.

Ontario—G. T. Bailey, Walkerville; M. N. Beck, Windsor; C. G. Campbell, Windsor; S. H. Campbell, Windsor; J. L. Cohen, Windsor; P. G. Crozier, Windsor; H. R. Hamilton; Chatham; J. I. Humphries, Windsor; J. Ketchum, Harrow; L. H. Killorn, Windsor; S. W. Leslie, Toronto; W. H. McKibbon, Wingham; D. G. McMullen, Essex; M. E. Nesseth, Windsor; F. G. Palanek, Chatham; F. T. Reid, Chatham; James Reid, Leamington; A. L. Story, Blenheim; H. G. Stratton, Windsor; Alan Taylor, Windsor; A. T. Wachna, Windsor.

Quebec—George Saine, Sherbrooke.

What They Thought of the 1950 Michigan Postgraduate Clinical Institute

Walter C. Alvarez, M.D., Rochester, Minnesota (Guest Essayist): "Thank you for your many kindnesses. I enjoyed my stay in Detroit and the fine audience."

W. L. Benedict, M.D., Rochester, Minnesota (Guest Essayist): "It was a pleasure for me to be permitted to participate in the program of the Michigan Postgraduate Clinical Institute in Detroit last week, and I was rather flattered at the large attendance. I was unable to spend as much time at the meeting as I originally had planned because some urgent matters made it necessary for me to return immediately after my paper had been delivered. I have had considerable experience with meetings such as yours, and I can tell you truthfully that I think you have one of the best-managed and most useful postgraduate clinical programs that has come to my attention. I know that your future meetings will be even more successful."

Bayard Carter, M.D., Durham, North Carolina (Guest Essayist): "This note is to thank you for allowing me to take part in a stimulating meeting. I enjoyed all of it. With appreciation."

William K. Diehl, M.D., Baltimore, Maryland (Guest Essayist): "I wish to take this opportunity to thank you and the Michigan Society for your hospitality during my stay at the Postgraduate Institute. I enjoyed the meetings very much and derived a great deal of pleasure from the privilege of being a participant in the panel discussion on cancer. Thank you again, and with kindest regards."

Richard H. Freyberg, M.D., New York City (Guest Essayist): "I enjoyed this meeting very much. It was like home-coming for me. I particularly appreciated the hospitality shown me. Dr. Sol Meyers was very attentive. He had a nice luncheon for me Friday noon and of course I greatly appreciated the testimonial dinner for Dr. Coller whom I have always admired. I wish the Institute continued success. Best personal regards."

J. Mason Hundley, Jr., M.D., Baltimore, Maryland (Guest Essayist): "I wish to thank you for your many kindnesses shown me at the recent Michigan Postgraduate Clinical Institute. When I went to pay my hotel bill I found it had been taken care of, for which I am most appreciative. Also thank you for the delicious fruit which came up to my room and which we enjoyed. I presume you were the one that arranged this. It was a great pleasure to meet with you and Dr. Diehl and I enjoyed our stay there very much."

F. E. Senear, M.D., Chicago, Illinois (Guest Essayist): "I thank you for your letter which reached me this morning. As is usual with any meeting of the Michigan State Medical Society, the arrangements were perfect and I enjoyed the opportunity of being one of the guest speakers."

(Continued on Page 524)

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YOU KNOW of the published clinical and laboratory studies* which have shown PHILIP MORRIS Cigarettes to be less irritating. BUT NOW—in seconds—YOU CAN MAKE YOUR *OWN* TEST . . . simple but convincing. Won't you try it?

HERE IS ALL YOU DO:

1... light up a PHILIP MORRIS

Take a puff — DON'T INHALE. Just s-l-o-w-l-y let the smoke come through your nose. AND NOW...

2... light up your present brand

DON'T INHALE. Just take a puff and s-l-o-w-l-y let the smoke come through your nose. Notice that bite, that sting? Quite a difference from PHILIP MORRIS!

With proof so conclusive, would it not be good practice to suggest PHILIP MORRIS to your patients who smoke?

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*Proc. Soc. Exp. Biol. and Med., 1934, 32, 241-245; N. Y. State Journ. Med., Vol. 35, 6-1-25, No. 11, 590-592; Laryngoscope, Feb. 1935. Vol. XLV, No. 2, 149-154; Laryngoscope, 1937, Vol. XLVII. No. 1, 58-60

WHAT THEY THOUGHT

(Continued from Page 522)

Isadore Snapper, M.D., New York City (Guest Essayist): "I had a very pleasant time in Detroit and was very much honored in the way that I was received."

J. E. Burks, M.D., Crawfordsville, Ind. (Guest): "I feel my attendance at the recent Michigan Postgraduate Clinical Institute was indeed very worthwhile time spent. I want to commend the Institute on its choice of speakers, diversity of subject, and efficient presentation. The point that impressed me was the ability to present a great many facts in a twenty- and thirty-minute period of time. I plan very definitely to attend next March 14, 15, and 16, 1951."

P. G. Crozier, M.D., Windsor, Ontario, Canada (Guest): "I am a graduate of the University of Western Ontario Medical School, and I was especially interested to note how closely the pattern of our own Conferences follows that of the Michigan Postgraduate Clinical Institute. This may not be altogether a coincidence, as the professional staff no doubt combined the better features of many similar conferences, including your own and those of other leading American Institutes. I was pleased with the care given to details such as excellent amplification in the lecture hall, the co-ordination of the projection operator and speaker, and the honest attempt at maintaining a schedule. I feel your lecture topics were well chosen, and most speakers were impressive. I would be happy to receive an invitation to your future conferences, and I would make every effort to attend. Thanking you for your Southern Hospitality."

S. W. Leslie, M.D., Toronto, Ontario, Canada (Guest): "I wish to express my sincerest thanks and appreciation for permitting me to attend the clinics. I might say, for publication if you wish, that I have been attending many postgraduate clinics in the past number of years which are being given annually in the States, but I have yet to attend one which can surpass the programme content, the authoritative papers, and the fine technical exhibits of the 1950 M.P.C.I. I will certainly avail myself of the invitation to attend in 1951."

H. Allison, Miller, M.D., Marion, Indiana (Guest): "I want to state that I very much enjoyed my attendance at the recent Michigan Postgraduate Clinical Institute in Detroit. It was a very instructive meeting, well planned and well executed. Your group is to be highly commended for the efforts made to bring to us so instructive a meeting. I am already looking forward to attending the next meeting March 14 to 16, 1951."

POLITICAL MEDICINE

MEDICAL CARE FOR GOVERNMENT EMPLOYES

(Continued from Page 520)

Government. This was referred to the Committee on Labor and Public Welfare

Comment: This would authorize Federal Security Administrator, within the limits of existing Public Health Service facilities, to furnish to any civilian officer or employe of the Federal Government who has had a minimum of ten years' service and who is in need of hospitalization but is unable to defray the necessary expenses thereof, medical and hospital treatment for disability, disease, and injury, irrespective of whether such condition was sustained during the course of employment. The Federal Security Administrator would supply an application form which when executed would be accepted as sufficient evidence of inability to defray necessary expenses.

OLD AGE SECURITY

It is easy enough to promise every man or woman over sixty-five a monthly payment of $100, but each worker will be interested in how much $100 each month from Uncle Sam will actually buy. That is something the average man can understand because he already has had a large dose of it in the loss of purchasing power of his prewar savings. What is the farmers' present suspicion of the Brannan Plan millennium if not an expression of distrust in being promised too much? The farmer is afraid that, if he is to receive too much, he may end up with nothing. That is the type of language the worker, too, can understand. As long as the Fair Deal spokesmen can get away with the argument that the opposition is "against the Welfare State" because it leads away from the old laissez-faire days, they hold the winning hand. This is the type of controversy that must be argued out not on the basis of political principles but in terms of hard cash and common sense.—(Editorial, *The Journal of Commerce,* Dec. 5, 1949)

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*Pitt, C.K.: *The Art and Science of Artificial Infant Feeding, J.M. Asso. Ala. 19:101 (Oct.) 1949.*

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Cancer Comment

CRITERIA FOR DIAGNOSTIC CANCER TESTS

In the journal *Cancer,* for January, 1950, F. Homberger* presents a critical evaluation of some sixty diagnostic tests for cancer based largely on biochemical reactions in body fluids and tissues. Without attempting to summarize this informative paper, it may be of value to quote the criteria that should govern the use and interpretation of such tests in this important medical field.

Criteria for a Test

"The ideal diagnostic test for any disease is one that allows discovery of the disease in its latent, asymptomatic stages. In order to be of practical value, such tests have to be technically simple. The procedures have to be reproducible. The specificity of the test should be as high as possible. Positive findings should be limited to cancer only or possibly to a few other conditions that could be ruled out easily by other diagnostic means. There should be no false-negative tests, an especially important point. Any procedure that would occasionally give a negative result in the presence of cancer would be most dangerous. On the other hand, considerable technical difficulties would arise if false-positive findings were often obtained with a given procedure. The economic problems of differential diagnosis in a great many individuals who, while actually healthy, might have positive 'tests' would be serious, not to speak of the mental anguish caused by such falsely 'positive' findings.

"The sensitivity of the procedure would have to be high. The earlier it could detect cancer, the better. The end point should be sharp, i.e., no 'doubtful' reactions should occur. These are severe requirements for any clinical test. They are fulfilled largely by the known serological and immunological procedures, as well as by diagnostic procedures for certain metabolic diseases, such as diabetes and disorders of calcium metabolism. They represent an ideal that has to be approached as closely as possible.

Evaluation of a Test

"Before any procedure is tested on patients to determine its clinical value, it is necessary to study its reproducibility and to investigate its technical soundness. For procedures that are based on conventional biochemical, immunological, or other techniques, this can be done by a simple study of the method as described by its originator. One will, however, be faced with procedures that are new and unorthodox. In such cases, the method has to be studied step by step by personnel familiar with its technicalities or with the originator, who has to demonstrate all methodological details. The reproducibility of the method is important and should be checked on a number of specimens from the same patient, as well as on a number of subfractions of one and the same sample. If biological systems are employed, the strict control of all conditions is essential.

"In cases in which a biochemical characteristic of blood, urine, etc., is claimed to be diagnostic for cancer but is known already to be unstable or subject to great variations under the conditions proposed for the test, the mere demonstration of such variability should suffice for its rejection.

Clinical Evaluation

"Those techniques that can stand such scrutiny as just outlined may be considered for clinical evaluation.

"There are two phases to the clinical evaluation:

"1. The first step seems to be the elimination of any test that is certainly not specific and has little chance of being of diagnostic value. It appears possible to do this first screening by studying the results of any proposed procedure in a sample group of patients with proved cancer. This sample should include various stages and types of the disease, and its size would have to be determined by statistical considerations. If a suggested procedure is claimed to be diagnostic for a given type of cancer only, the first sample will, of course, be limited to that type of disease. This initial step would demonstrate the ability of the procedure tested to detect cancer in those stages that are ascertainable by conventional diagnostic means. It may be assumed that tests that fail at this level would be even less successful in earlier stages of cancer. This first-stage screening presents the most favorable conditions by which any procedure can demonstrate its effectiveness as a diagnostic tool. If, with such favorable premises, the failure rate is significantly high, the procedure studied may be discarded as a diagnostic aid. If the rate of correct positive diagnoses is high, the procedure deserves further study.

"2. This additional evaluation has to be carried out on patients with cancer at increasingly early stages and not merely on control subjects who are well by general standards but on those who are afflicted with diseases that would present serious differential diagnostic difficulties in distinguishing them from cancer. Finally, patients suffering from other types of chronic debilitating disease should be tested.

"The sample groups in each instance should be sufficiently large to yield significant data.

"The final judgment of any diagnostic procedure will, of course, depend on the results obtained in the field over a prolonged period of time and on large numbers of patients."

• • •

Four out of five cancers of the head and neck are clinically obvious. One out of five is obscure.

• • •

Fortunate is the patient in the hands of a physician who is suspicious of anything obvious and investigates immediately.

*Homberger, F.: Cancer, 3:145, (Jan.) 1950.

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Editorial Comment

POLITICAL MEDICINE VS. FREE MEDICINE

The British ministry of health reports that the year ending March 31, 1949, was Britain's best year in terms of good health. It was the first year in which socialized medicine was operative in Britain.

The death rate in Britain was 10.8 in 1,000. The infant mortality rate was 34 in 1,000.

The United States, where medicine is a free profession, despite the efforts of the Truman administration to bring it under state control, had a death rate of 9.9 for each 1,000 population in 1948, the last year for which statistics are available. The infant mortality rate for 1948 was 32 in 1,000 babies in their first year of life. Our showing in both of these categories was better than Britain's.

Oscar Ewing, the federal security administrator, who is the chief administration proponent of political medicine, came back from England a few months ago praising British socialized medicine to the skies. If that system is better for everybody, why do the figures show the contrary?—*Chicago Tribune,* April 8, 1950.

ARE DOCTORS CITIZENS?

There has been plenty of evidence in recent years to suggest that some people in this country are not altogether certain of the answer to the question: are doctors citizens?

The astonishing demand from several political sources, that payment for doctors' services be made by Government paymasters, is compelling indication that some people think the doctor is different from other citizens, with a different sort of civic obligation and a different sort of individual rights.

No other professional man in America—no businessman, no butcher, no plumber, no baker, no clergyman, no grocer, so far as we know—has to date been nominated to share with the doctor the dubious distinction of having his income paid by Government and his product or service made "free" to all comers. It is conceivable such suggestions may come later. Certainly in the logic of socialism, a case could be argued for making the work of all these essential people a function of Government.

Perhaps some day such a case will be urged. We have an idea that when it is, it will split wide open on the plumber. There is a hard core of common sense in the American people and a blunt insistence on the individual freedom of every man.

There are a good many things American citizens won't stand still for—and don't expect other citizens to stand still for either. Which brings us back to the question, "Are doctors citizens?"

We'll know more about the answer after next November. The coming Congressional elections will give the whole country a good yardstick with which to measure the citizenship of the medical profession.

Is it a citizenship that influences Government, a citizenship that is informed about candidates, a citizenship that means registration, voting, working for the candidate chosen?

Or is it negative and passive when faced with the vital issues of an urgent time? Is it too busy to be concerned with the public business of democratic Government?

The answer is up to every doctor. And the testing time will be the coming elections—the primaries as well as the final races in November.

This is the time for doctors to demonstrate in action what their citizenship means in America. Conceivably, it may be the last time.—Submitted by A.M.A.

MEDICINE AND POLITICS—1950

"Politics and medicine don't mix!"

Statements like this frequently are employed by many doctors to justify their failure to register, failure to vote and failure to take part in the political decisions of the local community, the State and the Nation.

Added to this viewpoint is the indisputable and somewhat extenuating fact that the best doctors are extremely busy people, engaged in the night-and-day task of preserving health and saving life.

Nevertheless, this year of decision, 1950, presents American doctors with an undeniable paradox: doctors either must enter the political arena or see politics enter medicine.

For this is not just another election year. It is a year in which medicine itself will be one of the big clay pigeons on the political shooting ranges. The question of Compulsory versus Voluntary Health Insurance—embodying the future not only of the medical profession but of all the American people—will be one of the principal issues in the 1950 Congressional elections.

It is imperative, therefore, that every doctor exercise his franchise this year—his right *as an individual citizen* to register, to vote, and to help influence the political direction of his Nation. Failure to do so, this year, may mean the ultimate termination of his traditional medical franchise—the right to practice medicine according to ethical professional and scientific standards—not political standards.—Submitted by A.M.A.

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Lesser Known Uses of Thyroid Substance

By Robert C. Moehlig, M.D.
Detroit, Michigan

WHILE THE USE of thyroid is well known for classical cases of congenital and acquired hypothyroidism, there are many occasions where it is useful in unrecognized manifestations of thyroid disturbance. I shall cite some of these conditions.

In some cases of *alopecia* which include loss of the eyebrows, eyelashes, axillary, pubic and body hair, the use of thyroid has proven beneficial. I have seen cases of this type accompanied by a degenerating type of goiter which has reduced the amount of normal thyroid secretion resulting in a minus metabolism. Giving thyroid in these cases may produce signs and symptoms of hyperthyroidism without however necessarily raising the metabolism to normal and without correcting the alopecia. These individuals must have the goiter removed and even without the use of thyroid substance the alopecia is corrected following the thyroidectomy.

It is not sufficiently stressed that a patient may have a goiter and still have a minus metabolism. This type of goiter, which is seen in cretinism in about two-thirds of the cases, is a degenerating type and fails to deliver a sufficient amount of thyroid secretion. The metabolic rate may be misleading and every individual should be examined for a goiter. It is important that the examiner place his thumb and index finger around the thyroid cartilage, and have the patient swallow.

From the Department of Medicine, Harper Hospital.
Presented before the Northern Tri-State Medical Society, April 12, 1949.

It is surprising the number of goiters that are overlooked because of a superfacial neck examination. Too frequently the practitioner depends upon the basal metabolism apparatus to tell him whether a goiter is present or not. One should treat the patient and not the basal metabolic rate.

Another use of thyroid that is not too well known is in certain types of *vertigo* or *dizziness*. Hypothyroidism may show itself in the vestibular or balancing apparatus. This is frequently seen in congenital hypothyroidism as manifested by hearing defects; about 85 per cent of cretins have difficulty with hearing in greater or lesser degree. The peripheral hearing apparatus is defectively developed in cretins and it is not surprising that in adult hypothyroidism vertigo may be present. The dizziness may be so severe that a brain tumor may be suspected.

Scholz[9] and others found that fully one-half of adult myxedematous patients have disturances in hearing. Besides the hearing disturbance these patients complain of dizziness and they usually have a low metabolic rate. The correction of the dizziness by the administration of thyroid is gratifying.

I have a fairly large series of patients with a goiter and a low metabolic rate in whom the removal of the goiter was sufficient to correct the vertigo. In some patients after a few months thyroid substance may have to be given to correct the hypothyroidism. Barlow[1] of the Mayo Clinic as well as I[6] have reported a series of cases benefited by thyroid therapy.

Those patients who have such conditions as otosclerosis and organic nerve deafness are not benefited by thyroid but in some cases of early nerve deafness thyroid is worthy of a trial. It is of interest that congenital goiters are related to defects in the peripheral hearing apparatus and

may not show symptoms of nerve deafness until middle life.

That the thyroid gland and the nervous system are related is, of course, well known and there is a relationship between the auditory nerve and the thyroid. Sometimes in middle life the auditory nerve begins to degenerate, which shows itself clinically by ringing in the ears, dizziness, and finally, total deafness. The use of thyroid may help in the early stages.

Thyroid has been used for *chronic headaches* in which other causes have not been found. Some cases of true migraine have received benefit from thyroid. It is of interest how many patients have been relieved of their headaches by thyroid. One of the first symptoms of thyroid overdosage is headache. This seems paradoxical, for thyroid has been prescribed for headaches and, as stated, overdosage results in headache. How thyroid helps these individuals with chronic headache is not definitely known and there is no need to enter into speculative theories, suffice it to say that when other measures have failed in chronic headache, a trial of thyroid with a beginning dose of ½ grain may be worth while.

In children with chronic headaches, particularly where there is a familial history of migraine, thyroid has been shown to be of great benefit. Improvement, if it is to follow, usually comes within three to four weeks after beginning therapy.

Since we are on the subject of chronic headaches, there is a remedy for migraine in women that has given me a great deal of satisfaction, and naturally the patients suffering from the condition are exceedingly grateful. This drug is methyl testosterone and was used in forty-four patients with only four failures. There are certain limitations to its use, in that large doses will produce masculinizing signs. However this drug has given remarkable results. The dosage was begun with 20 mg. daily and results were achieved within four to six weeks, and if it was not obtained within this time it was discontinued. Details of this will be published in the Journal of the Michigan State Medical Society.

Another place where thyroid therapy may be of benefit is in *recurring conjunctivitis.*

This is particularly true in mild hypothyroidism which may be unrecognized. Ophthalmologists have used iodides for years in an empiric way for chronic conjunctivitis. It is not surprising that thyroid is helpful in conjunctivitis since the conjunctiva has the same embryological origin as the skin, and as we know, lack of thyroid produces a dry skin with inflammatory changes.

The same holds true for *corneal ulceration,* which may be stubborn but thyroid may actually cure the condition. Certainly thyroid is worthy of a trial in these cases, and while the antibiotics and sulfa drugs have given brilliant results, nevertheless in those cases not due to a bacterial cause thyroid has proven of great benefit in chronic ulceration of the cornea.

Another condition in which thyroid has been found to be of benefit is in the *chronic nasal cold.* I do not wish to give the impression that the usual type of nasal colds are helped by thyroid. However it has been shown by Bryant[4] and myself[7] that chronic nasal colds and susceptibility to coryza are relieved and prevented by thyroid. For instance, Bryant found that sixty-five children with recurrent head colds were benfited by thyroid. These had hypothyroidism. That this therapy has a physiological basis is shown by the fact that in congenital hypothyroidism there is chronic nasal catarrh and a defectively developed nasal epithelium.

That there is a close relationship between the thyroid and chronic nasal disturbances is also shown by the fact that iodine may produce rhinorrhea or a "running nose;" that is, the nasal epithelium is stimulated by iodine. The same is true of thyroid substance. It may also be stated that the saddle nose is not due to syphilis, but the cartilage of the nose does not develop, just as the rest of the skeletal cartilage fails to develop properly.

Thyroid has been found useful in individuals who complain of *dryness of the mouth* due to lack of salivary gland secretion. It is not too well known that the thyroid gland is necessary for the development of the salivary glands. In puppies the removal of the thyroid results in nondevelopment of the salivary glands including the parotid gland. Naturally if this is so, then a lack of thyroid secretion would result in a lack of salivary gland stimulation and dryness of the mouth is the result. You are all familiar with the salivation induced by the iodide group of drugs as a result of salivary gland stimulation, and in some sensitive individuals, particularly those belonging to the hayfever, asthmatic allergic group, the administration of iodine will cause excessive swelling

of all the salivary glands even with a small dose of the drug.

Thyroid has been successfully used in *reccurent swelling of the parotid gland.* I saw two cases in girls aged eight and nine years who had periodic swelling of the parotid gland associated with a colloid enlargement of the thyroid. The administration of thyroid gr. ½ for a period of two months resulted in no recurrence of the parotid swelling. It is now over a year since swelling occurred. Previously the parotid swelling occurred every two to three months. The eight-year-old patient had this periodic parotid swelling since the age of nine months.

There is unquestionably a close relationship between the thyroid and the salivary glands. It is also of some interest that the dryness of the mouth seen in women at the menopause may be benefited by thyroid.

Thyroid has been used in certain *gastrointestinal disturbances.* In 1941 I[5] reported thirty-two cases of which twenty-four (75 per cent) complained of periodic headaches associated with sour eructations, nausea, belching of gas and distress in various parts of the abdomen. That a close relationship existed between the headache and real migraine is shown by the fact that nineteen (59 per cent) had a familial history of migraine. The abdominal distress in some patients simulated peptic ulcer, the pain coming from one half to two hours after meals. Sour eructations, belching of gas and nausea were also outstanding symptoms.

Various forms of diet, including ulcer regimen, with alkalis, antispasmodics, vitamins and other forms of medication had been tried.

The basal metabolic rate ranged from zero to minus 23 per cent, the average being minus 15 per cent. The blood cholesterol was usually elevated as it is in migraine. I found that the average blood cholesterol in migraine was 225 mg. where the upper limit of normal was 200 mg. per 100 c.c. of blood.

Because of the history of headache and familial migraine in several patients, the elevated blood cholesterol and the low basal metabolic rate, small doses of thyroid, gr. ½ to gr. ¾, were given in daily dosage. Improvement followed in a short time with disappearance of the headache and gastrointestinal symptoms. Bassler[2] also reported cases of marked hypothyroidism with abdominal symptoms consisting of abdominal pain simulating gastroduodenal ulcer, cholecystitis and appendicitis. These cases were relieved by thyroid therapy. His patients presented low blood pressure, leukopenia and a low basal metabolic rate.

Gastroenterologists must see this condition more frequently than other specialists. That surgeons do is shown by the fact that a high percentage of these patients have had appendectomies.

Ramsey[8] said that in myxedema the gastrointestinal symptoms are anorexia, flatulence especially after meals, constipation, occasional nausea and vomiting, gastric hypoacidity and achlorhydria and abdominal pains which may simulate gastroduodenal ulcer, cholecystitis and appendicitis.

Thyroid has a place in the *chronic constipation of hypothyroidism.* By stimulating the sympathetic nervous system it increases the tone of the intestinal musculature. Even in cases of Hirschsprung's disease or megacolon thyroid has been useful; one author[3] goes so far as to say that the symptoms of congenital hypothyroidism and megacolon were so definite that it is believed that the proved pathologic changes of the two diseases justify the assumption that Hirschsprung's disease or megacolon is caused by congenital hypothyroidism in probably all cases and is therefore not a disease but a subsyndrome of hypothyroidism. Thyroid increases peristalsis in hypothyroidism and thus helps to overcome constipation. It has also been used in some cases where hypothyroidism does not exist but where increased sympathetic nervous stimulus is desired. One calls to mind in this connection the diarrhea that frequently accompanies hyperthyroidism. Here the central nervous system and the peripheral sympathetic nervous system are overstimulated.

Habitual Abortion.—One of the better known uses of thyroid is in habitual abortion. Some women are in a state close to sterility because of hypothyroidism. Should they become pregnant the development of the amnion and chorion is defective and abortion follows. It is in these cases that thyroid is worthy of trial. Of course there are certain features which may be recognized as due to hypothyroidism. Dry skin, brittle nails, muscular fatigue, mental dullness, myxedematous infiltration of the skin and some of the other hypothyroid signs including a low metabolic rate.

The administration of thyroid substance may enable the patient to become pregnant but if insufficient thyroid is given, then abortion may fol-

low. At least ½ to 1 grain of thyroid should be given daily, naturally with frequent check-ups.

It should be stressed that there are many women who have a goiter and who because of this are unable to become pregnant. These women do not show the signs or symptoms of a toxic goiter, but the presence of the goiter seems sufficient to make them sterile. If thyroid is given to these women there is a great possibility of making the goiter toxic.

The procedure that I have found to be best in these cases is to have the goiter removed, and it is surprising how many women are able to become pregnant following thyroidectomy even without the administration of thyroid. However, and I feel this is important for the sake of the child's future, thyroid should be given for this because it is the best way to prevent a goiter in the offspring. This should be done even if the mother has had a thyroidectomy, for the hereditary factor of goiter is transmitted and therefore thyroid should be administered to the mother. This should be given as soon as the mother knows she is pregnant, for the thyroid gland is laid down in the early weeks of embryo formation.

A half a grain of thyroid may or may not be sufficient; naturally the daily dosage must be guided by the signs, symptoms and metabolic rate. During the end of pregnancy around the seventh or eighth month the dosage may be reduced, for the metabolism becomes elevated during the latter months of pregnancy.

The administration of thyroid or iodine during pregnancy is one of the best ways of preventing a goiter in the offspring. Of course the patient must have frequent check-ups.

It must be stressed that thyroid administered during pregnancy is a two-edged sword; while the proper dose is one of the best ways of preventing a goiter in the offspring, nevertheless the prescribing of large doses such as 2 to 4 grains of thyroid to pregnant women may produce irreparable damage to the brain of the fetus, and while definite proof is still lacking, I have seen two cases of mongolism in infants whose mothers were given 5 and 10 grains of thyroid throughout pregnancy. I cannot help but feel that the thyroid relationship to the nervous system is such a close one that overdosage of thyroid substance may be responsible for the damage to the brain cells.

Small doses of thyroid such as ½ to 1 grain are safer, and even in this size of dose close supervision of the pregnant mother is absolutely necessary.

Still another important use of thyroid is in *stimulating the pituitary gland.* Since we have no potent extract from the pituitary gland itself the use of thyroid to stimulate the pituitary finds many uses. It is especially helpful in cases of amenorrhea, particularly those due to primary pituitary hypofunction. The administration of thyroid plus some form of estrogen, such as stilbestrol in one of its various forms or, as I prefer, the natural occurring estrogens derived from pregnant mare urine, is helpful in amenorrhea. In administering this combination it is helpful to remember that the thyroid may be given continuously in contrast to the estrogen in which it is necessary after three weeks to interrupt their administration to permit withdrawal bleeding. If no menstruation has taken place after a ten- to twelve-day period of waiting, then estrogen may again be given for three weeks. While I am on the subject of amenorrhea, it is well to state that in girls who have never menstruated priming of menstruation may be brought about by giving estrogens for twenty-one days or just fourteen days followed by two injections on successive days of estradiol or estrone, such as 25,000 units of theelin or its equivalent and in same syringe 12.5 units of progesterone, that is, one injection of these two substances combined on two successive days. Menstruation usually follows in four to seven days. This procedure may be repeated the next month and then a trial of oral estrogen for twenty-one days without giving the two injections. Today several firms supply the estrogen and progesterone combined in one ampoule. Some are doubling the amount, that is, 50,000 units of estradiol, the estrogen, and 25 units of progesterone, in one ampoule.

Thyroid in small doses such as ¼ grain or ½ grain is also useful as a synergist to chorionic gonadotrophic hormone in cryptorchism.

Thyroid has been found beneficial where *diuresis* is desired. By speeding up the metabolism and probably by stimulating both anterior and posterior pituitary lobes which have to do with water metabolism, thyroid produces diuresis. Likewise the heat-regulating center, the hypothalamus is stimulated by the thyroid. This is shown by the fact that in a thyroid crisis or storm, the heat-regulating center is activated to such a degree of hyperthermia that death may result. The water metabolism is speeded up by thyroid therapy.

It may be stated in passing that hibernating animals may be brought out of their hibernating state by the administration of thyroid or the injection of thyroxin.

By speeding up the metabolism some cases of *arthritis* are benefited by thyroid therapy. The joints become warmer and the pain lessens, but too large a dose such as 1½ to 4 grains may produce such a stimulus to the nervous system that vasoconstriction may result and the arthritis is made worse by this dosage of thyroid.

In congenital *epiphysitis,* thyroid has been used. The so-called Perthe-Legges disease or osteochondritis deformans juvenilis may be helped by thyroid therapy. One-half to 1 grain over a period of months may be helpful, and in addition to this I give the male patients who are around the age of seven or eight years or older about twelve to fifteen injections of chorionic gonadotrophic hormone if cryptorchism is present. These boys are usually obese and have epiphysitis with loose ligamentous and supportive tissue structures.

Thyroid has found a place in some types of *anemia.* This is especially true of the hypochromic type of anemia associated with hypothyroidism. In congenital hypothyroidism the bone marrow is in a hypoplastic state and this is also true of the adult acquired type. It is of interest that the combination of thyroid and iron correct the anemia whereas the administration of thyroid or iron alone fails to overcome the anemia. Thyroid treatment has been found to render the differential white count normal by increasing the polymorphonuclear cells, a reaction which has been termed paradoxical, as in healthy persons thyroid substance induces a mononuclear increase. In outspoken cases of hypothyroidism anemia is seldom missing. The hemoglobin values diminish relatively greater than the red cells.

In this situation I cannot resist the temptation to state that in these cases of anemia resistant to both thyroid and iron and where no other case can be found, the use of testosterone by hypodermic in men has been of great benefit to overcome the anemia. Oral methyl testosterone has been of great service to women with anemia, but I cannot here go into details as to dosage. Suffice to repeat that it must be used with caution in women. However, it has a real physiological basis. It has been found to produce hyperplasia of the bone marrow.

Occasionally *mental depression* with melancholia has been helped by the administration of thyroid in ½ grain daily doses. Here too I have found methyl testosterone in women and testosterone proprionate by hypodermic of greater benefit than thyroid.

From this you may draw the conclusion that my paper should have been on the use of testosterone instead of thyroid.

As you well know, the dermatologists in the early days disagreed on the diagnosis but all prescribed sulfur ointment; so also in the past, endocrinologists disagreed on the endocrine diagnosis but all agreed to give thyroid. Fortunately both specialities have made great advances since those days and thyroid still retains a major role in endocrine therapeutics.

Returning to the use of thyroid, there are two other conditions in which it has been useful: one is in *heart block* or Stoke-Adams syndrome. Thyroid has been used to prevent the attacks of heart block. This use of thyroid has been advocated by Dr. Paul White.[10] He believes that the benefit is achieved by direct excitation of the ventricles.

The other condition in which thyroid has been found useful is in *angina pectoris.* This seems somewhat in contrast to the opinion that thyroidectomy reduces the metabolism and thus slows the work of the heart, and in this way lessening the attacks of angina. However, in true adult hypothyroidism with angina pectoris, the tone of the heart muscle is reduced and it is not an efficient pumping organ. It is in these cases of true hypothyroidism with angina pectoris that thyroid therapy may be of benefit. It must be stressed emphatically that the initial dosage must be small such as a half a grain daily and only gradually increased.

It should also be stated as a general rule that it requires approximately three weeks for the dose of thyroid to reach its maximum metabolic effect.

Having painted a rather rosy picture of thyroid therapy, it is well before concluding to list a few of the abuses to which thyroid administration has been put.

Perhaps one of the greatest abuses of thyroid therapy has been in obesity. For many years before thyroid required a prescription, patent medicines containing thyroid for reducing weight were sold by the millions. Reduction may be brought about but the price is the production of medicated hyperthyroidism. Of course, thyroid is indicated in those cases where actual hypothyroidism exists, but

it must be emphasized that the ordinary type of obesity may show a low metabolic rate without actual hypothyroidism being present. Some patients I have known received large doses of thyroid, such as 10 to 15 grains per day and in one case 32 grains. I remember one physician who couldn't resist eating, and he developed marked obesity. He would gorge himself and then take a handful (and what a big hand he had) of thyroid pills to prevent a gain in weight. It wasn't too long after doing this that I was called in an emergency to his office where he was dying of myocardial infarction.

Symptoms of insomnia, tachycardia, excessive perspiration and nervousness with irritability, crying spells and at times precordial pain are the result of chronic medicated hyperthyroidism. Some physicians treat the basal metabolism of the obese patient and continue to increase the dose regardless of the symptoms.

Great harm may be done by prescribing thyroid over a period of many months or years to obese children. Thyroid, by stimulating the metabolism, also stimulates the appetite. You are aware of the fact that the hyperthyroid patient has, as a rule, a good appetite, being almost constantly hungry. As a matter of fact, obese patients are frequently made hyperthyroid by a reduction diet and thyroid therapy—this is particularly true if the patient is conscientiously following his reduction diet.

Returning to obese children for whom thyroid is prescribed over a period of many months, it should be realized that thyroid has the ability to produce a negative calcium balance, and that means more calcium is lost in the urine than is absorbed, with the result that there is a loss of lime from the spine and other parts of the skeleton. This results in osteoporosis or thinning and weakness of the skeletal system. Should this take place in these fat children, then curvature of the spine results and the damage may be irreparable. These fat children are all the more susceptible because the excess weight puts an undue strain on the supportive structures of the skelton.

Regardless of whether we feel that the cause of obesity is endogenous or exogenous, it still requires dieting to correct it. In my opinion, individuals inherit a good appetite—probably an inherited appetite center, plus the fact that the way food is disposed of by the individual cells differs from the normal or thin individual.

As we know, the injection of an overdose of insulin produces hypoglycemia, which in turn stimulates the hunger center, and the individual eats to overcome it. If he does not do so, convulsions result, and these muscular contractions release sugar from the muscles and thus overcome the hypoglycemia.

Finally, let me conclude by warning not to give patients suffering from anxiety or psychoneurosis any thyroid, as they are made distinctly worse by it.

Summary

In this article thyroid substance was advocated for some conditions in which this drug was not too commonly used. Included in these condition were some forms of alopecia, usually associated with a goiter of the degenerative type; vertigo, chronic headaches, recurring conjunctivitis, corneal ulceration, chronic nasal cold, dryness of the mouth associated with underactivity of the salivary glands; recurrent swelling of the parotid gland, certain gastrointestinal disturbances, chronic constipation, habitual abortion, to stimulate the pituitary gland, to induce diuresis, some cases of arthritis, congenital epiphysitis, some types of anemia, mental depression, heart block and angina pectoris.

There are of course limitations to its use. Emphasis was placed upon the abuse of thyroid in obesity. Overdosage may produce a negative calcium balance.

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MSMS

And last, not least, in each perplexing case,
Learn the sweet magic of a cheerful face;
Not always smiling, but at least serene,
When grief and anguish cloud the anxious scene.
Each look, each movement, every word and tone,
Should tell your patient, you are all his own;
Not the mere worker, purchased to attend,
But the warm, ready, self-forgetting friend,
Whose genial presence in itself combines
The best of cordials, tonics, anodynes.

—Oliver Wendell Holmes

Some Clinical Uses of Endocrine Products in Gynecology

By Robert B. Kennedy, M.D.
Detroit, Michigan

I WOULD LIKE to present a few conditions where you can be reasonably sure of your treatment without expensive and time-consuming laboratory tests, the treatment being given purely on clinical symptoms and physical findings.

In taking repeated menstrual histories, you will find many of your patients fall into one of several groups.

Group 1. Hyperestrin Group

In Group 1, the hyperestrin group, you will find the following history:

1. The patient's breasts become sore before menstruation. This period of soreness varies greatly. It may start two weeks before expected menstruation or it may start two or three days before the expected period.
2. The duration of the period is from one to four days and it is not profuse. If the period is prolonged, it is more or less dribbling.
3. The patient loses very little blood and has no clots.
4. The patient does not complain of headache before or during period. Many will say they have never been troubled with any type of headache.
5. They usually do not have large families, showing a more or less relative sterility.
6. Their red cell count and hemoglobin are usually normal, very seldom showing a secondary anemia even if they give a history of uterine bleeding over several weeks' duration.
7. The patient will often complain of a thick mucous vaginal discharge which is due to hyperactivity of the cervical glands.
8. Nausea during pregnancy is usually not severe and of short duration.
9. This group is more likely to develop fibroids and endometriosis than the other groups.
10. They are more likely to abort during pregnancy.
11. Sexually, they are normal or on the hyper side.
12. They may or may not have dysmenorrhea, mild or severe. Occasionally they develop secondary dysmenorrhea.
13. They may be thin or overweight.
14. They may develop polycystic ovaries.
15. They seldom complain of ovarian pain if the ovaries are normal.

First, why do these people give this type of menstrual history?

Second, why do patients belonging to this group come to a physician?

First, this is the group you might say have too much estrin or theelin in their system, or it might be that they do not utilize the theelin or estrin as they should. For clinical purposes, you may say their estrin and progesterone are out of proportion and they have an excess of estrin.

Second, why do they come to a physician?

For Sterility

1. They may be having anovulatory menstruation, and if an endometrial biopsy is done close to menstruation, the endometrium will show a poorly developed secretory phase.
2. They may have so much thick mucous coming from the cervical canal it prevents the sperms from reaching the uterine cavity. The treatment here is thyroid to tolerance, progesterone 10 mg. intramuscularly every other day during the last fourteen days of the cycle, plus correcting the cervical discharge.

We know there are certain substances that either help these people utilize their estrin or neutralize the estrin. They are: (1) thyroid, (2) vitamin E, (3) testosterone, (4) progesterone.

For Soreness of Breasts Before or During Period

Some breasts will start becoming sore two weeks before the expected menstruation, some only two or three days before menstruation. Thyroid alone will sometimes control the symptoms. Sometimes thyroid plus vitamin E, in the form of pure alpha tocopherol, will be necessary. You should start with thyroid gr. ½ daily and increase weekly by gr. ½ daily until tolerance is reached. It is well to let the patient increase the dose until some of the toxic symptoms are produced, such as, headache, palpation of the heart, shortness of breath or tremor of fingers. You should then gradually reduce the dose until the toxic symptoms disappear. It is well to discontinue the thyroid therapy for two months during the summer. Many have to

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gradually reduce the dose if they are taking it over long periods of time. Vitamin E should be given as pure alpha tocopherol, in doses of 200 to 1,600 mg. daily. Testosterone is not used if the patient is desirous of becoming pregnant, since it may prevent ovulation. It is probably the most satisfactory way of treating the sore breasts. The buccal testosterone wafers can be used having the patient insert one or two 5 mg. wafers between the upper lip and gum each night just before she retires. She should start treatment as soon as the breasts begin to get sore and continue until menstruation starts. Progesterone may be given in 10 mg. doses intramuscularly every other day from the fourteenth to the twenty-fourth day of the cycle.

For Prolonged Uterine Spotting of Blood

The duration will vary from ten days to several weeks. It is usually scanty in amount, but enough to cause the patient to wear a Kotex or Tampex over long periods. It is of interest to note that these patients may have continued bleeding over long periods and will show no signs of secondary anemia. The red cell count will usually be over 4,000,000 and the hemoglobin will show 12 gm. or over. They usually have a low prothrombin time, around 45 per cent of normal. Many will stop dribbling on thyroid gr. 1 daily for four to six days. If this happens, they should be continued on thyroid therapy. If they show a low prothrombin time, it is well to give vitamin K, vitamin C, and vitamin P along with the thyroid. If this does not control them, they should have a diagnostic curettage with a thorough pelvic examination under anesthesia, to rule out a pelvic pathologic condition. The endometrium on microscopic examination will show hyperplastic proliferative phase or the so-called Swiss-cheese endometrium. Progesterone may also be used in the last fourteen days of the cycle. Oftentimes the curettage will straighten these patients out for several months. Occasionally testosterone will be necessary, in as small doses as possible, 10 mg. in oil twice weekly intramuscularily.

For Secondary Dysmenorrhea

By primary dysmenorrhea we mean painful menstruation since the beginning of menstruation. By secondary dysmenorrhea we mean the patient menstruated for several years without pain and gradually the periods became more and more painful. The pain may be of ovarian origin, in which case it starts from one to two days before the menstruation bleeding begins. If pain is ovarian in character, it is usually due to pelvic inflammatory disease or endometriosis of ovaries. Polycystic ovaries cause little pain. True ovarian cysts produce little pain until they become large enough to cause pressure symptoms on the surrounding structures. If it is uterine in origin it begins with the flow. The most common cause of secondary dysmenorrhea, uterine in origin, is adenomyosis of the uterus. Pelvic inflammatory disease, fibroids and fibrosis uteri have to be ruled out. If the pain is due to adenomyosis, surgical treatment is the treatment of choice, presacral sympathectomy or total hysterectomy depending upon the age of the patient or the number of living children. If the pain is ovarian in character and due to endometriosis, resection of the nerve supply to each ovary is the treatment of choice. However, medical treatment may be tried for a few months before resorting to surgery. Theelin or estrin in any form usually makes symptoms worse unless given in very large doses. Enteric-coated stilbestrol given in daily doses of 5 mg. or more from the fourteenth to the twenty-fourth day of the cycle will occasionally give relief. Anti-spasmodics may be used beginning with the flow. Testosterone orally or intramuscularly during the last ten days of the cycle will often help.

For Dyspareunia or Painful Intercourse

There are four main causes for dyspareunia:

1. Small hymenal orifice with hypertrophy of hymen, or rigid perineum, or both, which are surgically treated.

2. Posterior urethritis or trigonitis of the bladder. Posterior urethritis is treated with 5 per cent silver nitrate or by fulgeration. Trigonitis of the bladder is very often due to an endocervicitis, the lymphatics from the cervix coming up to the trigone of the bladder. The cervix must be treated to cure the trigonitis. This can be done by cautery, conization, amputation of the cervix or a total hysterectomy. A total hysterectomy in many cases is the only way to produce a cure.

3. Certain types of vaginal discharges. There are two frequent vaginal discharges which cause dyspareunia: (1) trichomonas vaginalis vaginitis; (2) fungus infections of the vagina.

4. Endometriosis of the pelvis. To produce dyspareunia, the endometriosis is either in the

cul-de-sac, the uterosacral ligaments or in the ovaries. The diagnosis of endometriosis can many times be made on vaginal examination, drawing the cervix forward, thus putting the uterosacrals on tension which may produce the pain they experience at intercourse. Examine the posterior cul-de-sac, carefully, for small shot-like masses, exquisitely tender, particularly so if just before or during menstruation. A history of long-standing pelvic discomfort with pain on bowel movement during the menstrual period may mean endometriosis of the posterior cul-de-sac. Enlarged adherent tender ovaries may mean chocolate cyst formation in the ovary. Patients with endometriosis may give a history of being treated over a long period for pelvic inflammatory disease with unsatisfactory results. These conditions may be treated medically or surgically.

There are many articles of literature on the surgical treatment of endometriosis. In the last few years, Dr. Karnaky of Houston, Texas, has been writing profusely on the treatment of endometriosis by the oral administration of stilbestrol (Des) made by the Grant Chemical Company. He starts with ½ mg. daily and increases it daily giving the patient large doses of seconal or nembutal by rectum to prevent nausea. He does this until the patient is taking 10 mg. daily and then eliminates the barbiturates. These patients must be hospitalized until they are able to take 10 mg. daily without nausea. From then on they can be discharged and it can be increased gradually without any gastrointestinal symptoms. Although Karnaky has never mentioned the necessity of hospitalization of patients at the beginning of the treatment, we have never been able to get a patient beyond 3 or 4 mg. per day at home without the patient stopping the medication because of nausea and vomiting. Therefore, hospitalization at the beginning of the treatment is very important. The dose is gradually increased until they are taking a daily dose of 250 to 300 mg. Then it is gradually reduced. The course of treatment covers from three to six months. So far, we have treated four cases of severe endometriosis of the pelvis by this method following surgery with a definite pathologic diagnosis. The results of these cases are still questionable. None of these patients were ever pregnant before treatment. All have finished their course in the last three months and to my knowledge none are pregnant to date.

One patient, an unmarried girl in her twenties, had an unusual amount of uterine bleeding during the months of stilbestrol therapy. On one occasion it was necessary to hospitalize and give blood transfusions and increase the stilbestrol to 500 mg. daily. This patient has been examined since therapy was completed. The nodule in the cul-de-sac is still present and very tender. Result: not satisfactory.

Another patient had dribbling of blood from the vagina almost continuously during her months of treatment. This patient was examined recently under an anesthetic and her pelvis feels entirely free of the nodules present at the beginning of the therapy.

The two other patients experienced no trouble during the course of treatment.

We know that pregnancy inhibits the progress of endometriosis, and it is on this theory the above treatment is based. During pregnancy the placenta produces estrin and progesterone in much larger quantities and continuously over several months' duration, and by the administration of stilbestrol in large doses over the long periods, the pregnant state is more or less simulated in part. Whether stilbestrol in large doses increases or does not increase the excretion of pregnandiol in the urine is still a debatable question, pregnandiol being the end result of progesterone metabolism. If its excretion is increased it means stilbestrol in large doses is utilized as progesterone. Smith and Smith contend this theory is correct.

Other workers, Davis from Chicago and two very reliable English investigators, contend that feeding stilbestrol does not increase the excretion of pregnandiol in the urine.

Another form of medical treatment is the continued use of small doses of testosterone daily by mouth or parenteral injections twice weekly, using the smallest doses which will control the patient's symptoms.

Again, stilbestrol in 5 mg. enteric-coated tablets may be given by mouth enough days of each cycle to control symptoms. It should not be given in the last four days of the cycle. If nausea occurs the first days of the therapy, small doses of seconal or nembutal by rectum may be used.

For Excessive Bleeding With Periods Of Amenorrhea

These patients are very uncommon but also very difficult to treat. The condition usually occurs in young girls from fourteen to eighteen years of age.

I have only treated three such cases in twenty-six years of practice. Usually you are first consulted when the patient is having repeated or continued uterine bleeding. The patients will lose three to four pints of blood daily and will require numerous blood transfusions to maintain life until the bleeding is controlled. Freshly drawn blood should be used instead of bank blood. Fresh blood will increase the patient's prothrombin time. On curettage, a hyperplastic proliferative endometrium will be found and many believe the profuse hemorrhage is due to pathology of the spiral vessels of the endometrium.

The treatment consists of four things: (1) stopping the uterine bleeding, (2) building up the patient's physical condition, (3) prevention of recurrence of such periods, (4) preservation of the generative organs.

Stopping the Uterine Hemorrhage. — This usually is accomplished with a very thorough curettage and packing the uterine cavity with one-inch sterile bandage soaked in 10 per cent ferric chloride solution, the excess solution well wrung out of the bandage before packing the uterine cavity. The packing is removed after twenty-four hours.

Building up the Physical Condition. — The repeated use of blood transfusions is the quickest and most satisfactory; 500 c.c. every other day until the red cell count and hemoglobin are well within normal limits.

Prevention of Future Hemorrhage.—X-ray to the pituitary and injections of an anterior pituitary-like hormone, which is the lutenizing hormone, have not proven satisfactory. In our experiences, intramuscular injections of testosterone in oil have given the best results. At present, we have one patient having normal regular periods of five days duration on 10 mg. of testosterone twice weekly intramuscularly. She has been on the regime for eight months or longer without showing any signs of masculinization. A member of her family was taught how to give the injections, and we see her in the office at intervals of two months. Thyroid, usually tolerated well, should be given in as large does as possible without producing toxic symptoms.

Maintenance of Good General Health.—(1) adequate diet, high in proteins; (2) diet may be supplemented with a capsule containing vitamins plus the tracer minerals, such as Roerig's Viterra Capsule; (3) encourage the patient to include plenty of citrus fruits, lemon peel, and skim milk in the diet; (4) have at least eight hours sleep nightly; (5) avoid emotional upsets and mental strain; (6) strive for normal elimination.

For Hyperestrinism at the Menopause

The patient complains of being exhausted and unable to do her house work, irritability and hard to live with. On questioning the patient, you will find they complain of soreness of breasts most of the time, do not suffer from headaches, have no hot flashes, no night sweats. They sleep well but require a lot of sleep. On examination they are usually well nourished, with blood pressure normal or below normal, red cell count and hemoglobin normal. They usually have a thick mucous discharge from the cervix. The basal metabolism is on the low side.

Treatment.—(1) Thyroid to bring their metabolism up to normal; (2) Buccal testosterone wafers, 5 mg. The patient should be instructed to place the wafer between the upper lip and upper gum on retiring. One or two daily, or the smallest dose possible to completely eliminate the soreness of the breasts.

On the above treatment, the patient usually returns feeling fine. Members of the family will see to it that her medication is kept up.

Group 2. Hypoestrin Group

In Group 2, the hypoestrin group, you will find the following history.

1. Sore breasts. Most frequently the patient has no breast changes before periods. The breasts may become a little engorged just before or during the period, but the patients do not complain of soreness.

2. Duration of period. These patients menstruate from six to eight days. The first few days the bleeding is profuse with clot formation. Many will say they wear three to four Kotex pads at a time for necessary protection. Many bleed so profusely that they are forced to stay off their feet for the first two days of their period.

3. These patients lose a lot of blood at each period.

4. Headaches. These patients usually com-

plain of headache in the occipital region or the top of the head from one to three days before menstruation or during menstruation. Many say they have had a great deal of headache all their life. Many feel sorry for themselves and belong to the group of chronic complainers.

5. These patients produce a good ovum each month and usually become pregnant very easily, and if contraceptives are not used, they have large families.

6. Anemia. The majority of these patients will show a definite secondary anemia.

7. Vaginal discharge. Unless they have trichomonas vaginalis, fungus infection or an endocervicitis with erosion, they do not complain of a discharge. Some will complain of their vagina being dry during intercourse.

8. Nausea during pregnancy. It is usually more marked than in Group 1 and may become quite stubborn to treatment. Many of these patients complain of severe headaches during the first part of pregnancy. The headache many times disappears on varying doses of stilbestrol, 5 to 15 mg. daily.

9. Fibroids, endometriosis. To my knowledge, I have never found fibroids or endometriosis in this particular group of patients.

10. Abortions. The percentage of abortions is considerably lower.

11. Sexually, they may be normal or may not be interested. Oftentimes they experience little or no satisfaction.

12. They may or may not have dysmenorrhea, mild or severe. They do not often develop secondary dysmonorrhea.

13. They may be thin or overweight.

14. They seldom develop polycystic ovaries.

15. Many complain of ovarian pain with normal appearing ovaries.

First, why do these people give this type of menstrual history?

Second, why do patients in this group consult physicians?

First, clinically this group seems to lack estrin and have an excessive amount of progesterone produced or they have a normal amount of estrin produced but use it up rapidly. The second explanation may seem more reasonable since at the menopause many of this group need large doses of estrin to control their menopausal symptoms and can take large doses without producing uterine bleeding.

For Excessive Loss of Blood at Menstruation

These patients have an excessively long period, lasting from six to eight days, sometimes ten days. The amount of blood loss and duration of the period can usually be controlled by feeding estrone sulfate by mouth. Estrone sulfate is used since it is readily utilized by the system and has no accumulative effect. It is well tolerated and very seldom causes side effects in the patients of any age. It is given daily from the fourth day of the cycle until the twenty-fourth day of each cycle in doses of 2.5 mg. daily. It is understood before such treatment is instituted that any pathological condition such as pelvic inflammatory disease must be ruled out.

For Premenstrual or Menstrual Headaches

Mostly, these headaches are in the occipital region but may involve the top of the head or the temporal regions. The headaches can be eliminated or greatly benefited by the administration of estrone sulfate by mouth from the fourth to the twenty-fourth day of the cycle. The dosage will vary from 1.25 to 2.5 mg. daily.

The complaint of feeling tired, difficulty in keeping up their housework, nervousness and irritability. On examination you will commonly find a lower red blood count and hemoglobin. They very often have a low basal metabolism. Many are allergic to food and have histamine headaches besides premenstrual headaches.

Treatment.—(1) anemia should be diagnosed and treated; (2) metabolism brought up to normal with thyroid; (3) adequate diet with vitamins and minerals; (4) estrone sulfate in large doses from the fourth to the twenty-fourth day of the cycle.

For No Sexual Satisfaction

In this group there are some who experience no sexual satisfaction and have an aversion to the sexual act. Occasionally estrins help but usually this is a psychiatric problem and is best treated by a psychiatrist.

For Nausea and Headaches at the Beginning of Pregnancy

The headaches are usually controlled easily by 5 mg. of stilbestrol daily. The nausea is treated by one of the many ways advocated at the present time.

After about three children in rapid succession, they want to know how to keep from becoming pregnant.

For Dysmenorrhea

Dysmenorrhea in this group is usually primary and a pregnancy with a delivery through the pelvis most times cures the dysmenorrhea. If pregnancy is impossible, estrin in the last fourteen days of the cycle will often help. Pranone or progesterone will not benefit dysmenorrhea in this group. Antispasmodics at the onset of menstruation may be tried and if no possibility of marriage is in view, a presacral neurectomy may be justified. If secondary dysmenorrhea develops, pelvic inflammatory disease must be suspected since endometriosis or fibroids seldom develop in this group.

Group 3. Hypoestrin-Hypoprogesterone Group

In Group 3, the hypoestrin-hypoprogesterone group, you will find the following history.

1. No soreness of breasts before menstruation.
2. Duration of menstruation is from one to three days.
3. Loses very little blood—no clots.
4. No occipital headaches before or during menstruation. If they do have headaches they are usually of the histamine type.
5. They show a relatively high rate of sterility.
6. They may or may not have dysmenorrhea.
7. Sexually they may be normal or below normal.
8. They seldom develop fibroids or endometriosis or adenomyosis.
9. They usually start to menstruate later in life than normal and have their menopause earlier than normal.
10. If they become pregnant, abortions and premature labors are higher than normal.
11. They may or may not be hypothyroid.
12. On pelvic examination the vagina, cervix and uterus are smaller than normal.

Why does this group give this type of history?

The genital organs are below normal in development. The pathology is probably in the pituitary gland or the thalamus. Their ovaries produce an insufficient amount of both the known ovarian hormones, namely, estrin and progesterone.

Why do these patients consult a physician

For Sterility

Their sterility is many times due to nonproduction of an ovum, or the production of an ovum which will not go on and develop after fertilization. When such a patient consults for sterility, the usual routine tests should first be done such as:

1. Determining the patency of the fallopian tubes.
2. Basal metabolism test.
3. General physical examination including complete blood count, urinalysis, et cetera.
4. Endometrial biopsy before menstruation starts.
5. Accurate sperm count on the husband with a total count per c.c. and differential and motility.
6. Basal temperature chart, or better, Pharis rat test for ovulation. If the conclusion is reached by the above tests that sterility is due to inadequate ovulation, several courses of treatment may be followed. Stimulation therapy or substitution therapy. Stimulation therapy may be twofold.

X-ray treatment, stimulating doses to the pituitary gland and to each ovary. Some authors claim as high as 40 per cent pregnancies occur after such treatment.

The use of the gonadotropins as stimulators to the ovaries, the follicle stimulating hormone being used in the first twelve days of the cycle and the lutenizing hormone being used in the last sixteen days of the cycle. It is now the opinion of some endocrinologists that these hormones used over too long a period will cause a further atrophy of the ovaries. Some clinics use fairly large doses of lutenizing hormones: 400 units every other day for fifteen doses, disregarding the menstrual period. All of the above treatment has been quite discouraging in our hands.

Substitution Therapy.—This form of treatment includes estrin. It is given by mouth or hypodermically during the first fourteen days of the cycle. Then during the last fourteen days, progesterone is given by hypodermic injection. Oral administration of progesterone has not proven satisfactory. This therapy should be kept up for at least three months.

If the patient lacks thyroid, it is very important to bring her metabolism up to normal.

Group 4. Normal Menstrual Group

Those belonging to this group have no menstrual difficulties and are seldom seen by a gynecologist.

Pre-Menstrual Tension

In Group 1, or the hyperestrin group, pre-menstrual tension is usually more common.

The treatment is aimed at utilizing or neutralizing estrin. This can be done in one of the several ways or a combination of ways:

1. Thyroid should be given daily if tolerated and to tolerance.
2. Progesterone by mouth or hypodermically.
3. Vitamin E by mouth.
4. Testosterone by mouth or hypodermically.
5. Ammonium chloride by mouth, enteric-coated tablets, 90 to 120 gr. daily. Intake of sodium should be restricted by the 200 mg. solium diet during this time. Ammonium chloride is best given over a three-day period with a rest of three or four days and repeated again for three days.

Pre-Menstrual Tension

In Group 2, or the hypoestrin group, pre-menstrual tension is not as frequent as in Group 1.

Treatment is aimed at supplying more estrin, in the younger patients estron sulfate by mouth in doses sufficient to control symptoms. In older patients, parenteral injections of estradiol benzoate or alpha estradiol in water or oil may be necessary. Testosterone by mouth or by hypodermic beginning before symptoms occur may be used with success.

Menopausal Symptoms

So many papers have been published on this topic it need only be mentioned. The patient may be still menstruating and complaining of one or more of the menopausal symptoms: (1) occipital headaches, (2) hot flashes, (3) night sweats, (4) inability to concentrate, (5) insomnia. If so, estrone sulfate in daily doses sufficient to control symptoms proves satisfactory in many.

If the patient is past the menopause, therefore not menstruating and wants to be relieved of distressing symptoms, ethinyl estradiol or alpha estradiol gives the patient more of a feeling of well being and relieves symptoms better than some of the other estrins or estrin-like drugs on the market. In a very small percentage of patients, oral therapy will fail and parenteral therapy will be necessary.

Amenorrhea

Amenorrhea may be primary when menstruation has never occurred or secondary when menstruation has previously occurred.

Causes of Amenorrhea. — (1) Mechanical causes. (a) imperforate hyman, (b) atresia of vagina, (c) congenital defects. (2) Pituitary derangements. (a) adiposogenital dystrophy (Frohlich's syndrome), (b) pituitary cachexia (Simmonds' disease), (c) pituitary adenoma. (3) Thyroid derangements. (a) primary hypothyroidism, (b) hyperthyroidism. (4) Adrenal gland derangements. (a) adrenocortical hyperactivity (adrenal virilism). (b) adrenal insufficiency (Addisons' disease). (5) Nervous system derangements, (a) anorexia nervosa, (b) mental diseases, (c) emotional states.

Treatment.—(1) If patient is overweight, reduce to average weight for height and age; (2) check metabolism, blood cholesterol, iodine content of blood. A very thin person may be a marked hypothyroid and require large doses. Keep metabolism slightly above normal; (3) high protein, high vitamin diet with adequate minerals; (4) X-ray stimulation to pituitary and ovaries; usually fails in primary amenorrhea; fair results in secondary amenorrhea; (5) artificial bleeding can be induced by several methods: (a) Zondek method—1,500 rate units of estradiol benzoate plus 12½ mg. progesterone daily for two doses—repeat every twenty-eight days for three months; (b) Kaufman method—100,000 I. U. estradiol benzoate every three days for five doses, then, 10 mg. progesterone daily for five days. Repeat therapy every twenty-eight days for three months; (c) stilbestrol 3 mg. by mouth daily for twenty days, then, stop for eight days. On the stilbestrol treatment I have had two patients become pregnant, go to term and deliver normal babies. One patient had not menstruated for two years before treatment was started and continued on above routine for one year before becoming pregnant. The second patient had been amenorrheic for six months before treatment began.

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Specificity of the Vitamins — Their Proper Clinical Use

By M. A. Blankenhorn, M.D.
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EVEN if I had much longer time, I would not devote much of it to a discussion of the specificity of all of the substances now known as vitamins. It would be a waste of time for me, a clinician, to go into matters that are biochemical and that deal with the nutrition of animals in experimental laboratories. Of this basic knowledge on which our clinical practice rests, there can be no doubt as to specificity of vitamins for specific deficiencies, but there may well be some doubt about the specificity of deficiency disease as it occurs naturally in man. There is certainly good reason to doubt the present-day methods of diagnosis of deficiency disease. It is because these doubts exist that such topics are put on your program.

I believe that many doctors have lost sight of the fact that vitamins were in every instance discovered by animal testing with specific diets, and their use in humans was based on rather loose analogy which found some similarity between the symptoms of disease in man and the provoked symptoms in animals. A good example to illustrate the method and the point I have in mind is the way in which nicotinic acid has been employed to prevent and cure pellagra to a degree that pellagra has become quite a rare disease. Pellagra was known to be prevalent among people who lived on diets of limited variety. It was produced in the early part of the century by Goldberger in human subjects by feeding limited diets. It was cured by good diets or by adding potent concentrates such as yeast and liver extract to poor diets. Similar poor diets caused black tongue in dogs (black tongue occurs naturally or spontaneously in dogs), and black tongue could be cured by liver extract and fractions of liver extract. Eventually, black tongue was cured by nicotinic acid, which is known to be a fraction of liver extract and can be synthesized from other sources than food. By seeing the similarity of black tongue to pellagra, physicians were led to treat pellagra with nicotinic acid successfully.

The acute dermatitis and glossitis phases of pellagra were promptly cured, and up to that point the cure was specific, but there remained other aspects of pellagra such as conjunctivitis and cheilosis, now known to be cured by riboflavin, and the neuritis, now cured by thiamine. It thus appeared that for a brief time a few years back, we thought the specific cause of pellagra was a lack of nicotinic acid in the diet and, of course, the cure was nicotinic acid. We were not long in finding the answer was not so easy nor the situation so simple. When the rôle of deficiency of riboflavin and thiamine was discovered also as a factor in pellagra, it became more clear that pellagra, as most deficiency diseases in man, was multiple and probably not ever specific in a strict sense. It has been knowledge of that fundamental principle that leads us to advise in every instance that correct diets be prescribed as the main and most important item in therapy. It thus appears that where deficiency diseases are easily recognized, this rather nonspecific method is usually successful, but no one knows what other phase or symptoms of pellagra might develop if people lived on poor diets for a long time, meanwhile supported by nicotinic acid, riboflavin and thiamine. Attempts have been made to find such parts of pellagra as may be cured by other fractions of liver extract, such as pyrodoxine or folic acid.

To a lesser degree, adult scurvy and beriberi are found to be complex or multiple deficiency states not entirely cured by adding vitamins to poor diet. It is thus I hope to show how hard it is to put forth specific quantitative information about the vitamins and their use in man. I may seem a bit pedantic in retailing now what everyone knows or once did know, but I go over the old ground because so much has been written about vitamins and so many miracles claimed that these simple beginnings and the incompleteness of our knowledge are frequently forgotten.

I should say something here about specific tests to diagnose vitamin deficiency diseases by assaying the body needs and the body stores. There is not very much to be said, however, except that mostly they are not precise enough to make any of them good tools for clinical research nor are they needed for clinical practice. In scurvy and in vitamin A disease, one can test the blood levels and in some instances also excretion rates in urine

From Department of Internal Medicine, University of Cincinnati, and Cincinnati General Hospital. This study was aided by a grant from the Robert Gould Research Foundation.
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after test doses are given and a rough approximate is reached so that one can say that a diagnosis is probable but not that diagnosis is certain. This parlous state of affairs is true for vitamin A, thiamine, nicotinic acid, riboflavin, ascorbic acid, pyrodoxine and vitamin D. With vitamin K, we are more exact, but we are certainly round about in our method, i.e. by measuring prothrombin time and not vitamin K. In this state of affairs, who is to say what is the proper use of the vitamins in the practice of medicine? There is now but one sensible answer, and that is whatever works and does no harm. There are some who would add to this formula—"whatever does not cost so much" and others would add "whatever can't be bought without prescription." The proper use then depends largely in what circumstance the well person becomes a patient.

What is proper depends in large part on what sort of patients one treats. In the Cincinnati General Hospital,[4] where I do most of my practice, many of the patients are chronically ill—some are underfed, more are poorly fed, some are acutely ill in ways that make nutrition difficult. Some are alcoholic and consequently have poor diets. We suspect deficiency disease among all these people, and in the last fifteen years have many times made diagnosis of and treated successfully a great many with pellagra, scurvy and beriberi. I recently reported a ten-year study showing a notable reduction in incidence and proposed that improved food and economic conditions have somehow improved the nutrition of these people. We still use a great many vitamins in our practice, however. In the calendar year 1949, the bill for vitamin therapy in the Cincinnati General Hospital was $6,354.00. This therapy was administered to 15,750 in-patients and 24,000 out-patients. The largest cost was for vitamin K, the next largest was vitamin B-complex injectable, and the third greatest was for multiple vitamin capsules which are mainly used in the out-patient. Altogether, less than 10 per cent of our vitamin costs are for out-patients. We think this is conservative—i.e., $6,354.00 being about 1.4 cents per patient. This does not include liver extract nor yeast. We have used pyrodoxine and vitamin B_{12} as experimental substances. We have used no vitamin E (alphotaceophesal) for heart disease or anything else. Most of the vitamin C is used by the Surgical Service.

I should say to general practitioners in your situation, as I assume it to be, that none of you will need give vitamins to the extent that I do. I do think it proper, however, to give them always to people who have lost weight for three months or more for any reason. Where there has been anemia and other deterioration because of prolonged fevers and other causes for increased metabolism—where the diet needs are peculiar and cannot be liberally varied because of heart, kidney or gastrointestinal disease—in all such situations where the need is greater than average and the intake less than normal, mixed vitamins may properly be given. The hard question now is how to tell when the intake is less than the need. This problem is most vexatious when we aim to produce maximum health and efficiency among apparently well people. It is vexatious when a survey is made of an entire population who are suspected, as are certain labor groups, share croppers, and others, or citizens in occupied European countries. The question is vexatious when we deal with individual patients in an office or hospital practice, and I have no handy formula which will answer these conditions. Within the past six years there has been a lot of thoughtful collecting and critical reviewing of literature which accomplishes a small monthly publication called *Nutritional Reviews*. It has been well received, and usually its reviews are correct. I recommend them to you, but there will be no ready relief from the vexation of these three questions I just mentioned.

The first question, about maximum health, has been the continued business of a committee of the American Medical Association and the National Research Council. The answer takes the form of the recommended daily allowances which are published from time to time. It is generally admitted by those on the committee that in the light of information gathered from starved populations in wartime and from amply fed populations as in our own armed forces that these allowances are high. In thiamine, the allowance has been revised downward. When army rations went over these allowances, no superior performance in work or well-being resulted. There is still no recommendation for any of the newer and more specific vitamins, such as pyrodoxine, pentothenic acid, folic acid or B_{12}. Only vitamin A, thiamine, riboflavin, niacine, ascorbic acid and vitamin D are well enough studied, and perhaps not those, but the committee puts the allowance plenty high. There is now available a report entitled "Malnutrition and Starvation in Western Netherlands,"[3]

a government publication from the Hague on the result of a survey. It is to be noted that whereas starvation had reached severe proportions among civilian population in 1945, and more than 10,000 lost their lives from famine, there was little evidence of specific clinical deficiency disease observed by the nutrition experts who came on the scene immediately after capitulation. I think this and other similar studies in semistarved people cast much doubt on the concept of hidden hunger among the general population in well-fed America. There is also not much now to support the notion that we can make supermen or superwomen by prescribing daily doses of vitamins. There is ample proof from the study of large groups that it cannot be done.

There remains now the problem of deciding in any given instance whether the patient shows any sign of malnutrition, i.e. a lack of sufficient vitamins. First, let me say that no accepted methods have been developed which uses biopsy of any one or several tissues. Also, no chemical tests are workable. The method of diet history-taking gives only a hint that nutritional failure may be present. There seems to be no diet anyone will eat that must in all instances cause deficiency disease. The accepted method for recognition of nutritional failure in an individual is the one employed in all modern nutrition surveys, whether it be of European war sufferers or U. S. soldiers on controlled ration experiments and that is the examination of the patient by inspection. This requires no instruments except good eyes and good light. When observers are trained and agree upon a uniform method of recording what they see, there is a high degree of agreement among teams or of paired examiners so that the method can be used as a research tool capable of statistical analysis. My former associate, Dr. William Bean,[2] made such a test of the methods of nutritionists and reported results in the *American Journal of Applied Physiology.*

Almost identical methods were used by the teams of physicians who went into Great Britain, Occupied France, and Holland. The same methods also were used in surveys of the white population in Labrador in 1944 and 1948.[1]

Since this method requires mainly an acceptance of a brief vocabulary together with definitions, I find it worth retailing here as a key to the diagnosis of nutritional failure, i.e. a guide to the proper use of vitamins.

It should be said at once than no *one* of the signs described is specific. Any may be caused by other than nutritional failure, but in the aggregate they are as precise as physical examination generally is. The skin, the mucous membranes of the eyes, mouth and tongue, and the nerves of the lower extremities are principally concerned.

Here are the descriptive terms or diagnostic signs with definitions:

Blepharitis is a diffuse inflammation involving the eyelid border. It may appear as a squamous (scaly) or ulcerative form. The squamous form is characterized by the presence of small scales seen on and between the cilia. Occasionally, a yellowish crusting due to over-secretion of the glands may occur accompanied by hyperemia but usually without ulceration. Cilia may become loosened and extruded. With the ulcerative type, in addition to the hyperemia and crusting, superficial abscess of the hair follicles may occur, appearing as small pustular elevations surrounding the base of the cilia. As the condition progresses over a long period, the follicles may be destroyed, the cilia permanently lost, and their pits occupied by scar tissue.

Chronic hypertrophic blepharitis with thickening of the eyelid border may result in drooping lid.

Xerosis is characterized by a thickening and loss of translucency of the sclera.

Pinquecula is a localized, visibly elevated, yellowish-grey colored thickening of the conjunctiva.

Suborbital pigmentation is a purplish-blue discoloration of the area immediately under the lower eyelids with or without swelling.

Angular stomatitis is a characteristic fissuring of the mucous membrane at the angles of the mouth. It is considered significant only when bilateral and when there is no external lesion at the angles of the mouth from which a fissure might lead. The presence or absence of a grey film over the lesion is not considered to be significant.

Cheilosis is a reddening of one or both lips, accompanied in more severe cases by transverse fissures.

Red gums may be found in the presence of normal dentition in the front part of the mouth from first molar on the left to the first on the right in both jaws.

Edema of gums is sought in the same area and with the same restrictions as applied to red gums.

Stomatitis is found only in the absence of carious

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Essentials in Psychotherapy

By Franz Alexander, M.D.
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THE DIFFERENT forms of psychotherapy constitute a most heterogeneous array of procedures: some of them are based on elaborate psychological theory; others merely on intuition and so-called common sense. They all have one feature in common: they all try to correct the patient's disturbed state of mind by psychological means.

Psychotherapy as an etiologically oriented procedure is based on the knowledge of psychodynamics, the science of motivations. Even in its most primitive form psychotherapy is based on some intuitive knowledge of human motivations. Everyone who tries to console a despondent friend, calm down a panicky child, in a sense practices psychotherapy. In doing so, he uses his common sense understanding of the nature of the disturbance. Talking over an acute harassing experience with someone is based on the intuitive knowledge of the curative effect of emotional unloading, called abreaction. Giving advice, while assuming a firm attitude, is also based on the common sense knowledge that the confused, frightened individual needs emotional support which we can give him by allowing him to lean on us. Intuitively we know also that a person who is overwhelmed by fear in a dangerous situation cannot use his reasoning faculties effectively and needs at first firm advice and not explanations. Only after he has calmed down can he obtain some rational insight into his condition. Giving him at first emotional support, then some explanations, combines supportive measures with insight. All this makes it evident that most of the well-established therapeutic factors used in medical psychotherapy, such as support, abreaction, insight, persuasion, and above all, emotional rapport with the disturbed person, are constantly used in everyday life. Medical psychotherapy is, to a large degree, a systematic application of methods by which we influence our fellow men in daily life. The most important difference between using psychology in everyday life and scientific psychotherapy is that in the latter intuitive knowledge is replaced by the well-established principles of psychodynamics.

The most consistent attempt to place psychotherapy on such generally valid psychological principles is represented by psychoanalysis. One must differentiate psychoanalytic therapy from the psychodynamic foundations of psychoanalysis. Psychoanalytic therapy, as originally conceived, is only one application of the psychodynamic principles established by psychoanalysis. In its classical form, psychoanalytic treatment can be applied only in certain types of cases.

From the psychodynamic point of view there are two kinds of psychotherapy: (1) supportive therapy, and (2) uncovering or reconstructive procedures. The rationale of these two kinds of procedures can be understood only in the light of the fundamental concepts of psychodynamics. Although psychotherapy is used in a great many conditions, such as in organic illnesses and in psychoses, its main application lies in the large group of psychoneuroses and somatic conditions in which emotional factors are important.

In all these conditions, we deal with an impaired function of the ego. When we speak of the ego, we refer to the organ system whose anatomical and physiological substratum is the highest integrative center of the central nervous system. The function of the ego consists in finding ways and means for the gratification of the subjective needs by adequate behavior. In the ego's functions three kinds of activities can be distinguished: (1) perception—both internal perception of the subjective needs and the external perception of the environment; (2) the integration of the data derived from both kinds of perceptive activities; (3) the executive function of the ego which consists in finding the type of motor behavior by which the subjective needs can be gratified in harmony with each other and the existing external conditions. The fact that this complex three-fold function of the ego can be disturbed in different ways, accounts for the various types of mental disturbances.

One large group of diseases based on disturbed ego functions are psychiatric disturbances caused by organic changes of the brain tissue resulting from mechanical injuries or toxic influences or progressive degeneration due to the aging process. In such conditions psychotherapy has only an accessory and occasional application.

Another group comprises psychiatric conditions which are due to injurious experiences in inter-

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personal relationships. These may be acute or chronic.

Acute Conditions.—Under the influence of excessive emotions, rage, grief, and frustration, and particularly anxiety, the ego's integrative functions may be temporarily impaired. Everyone experiences occasionally the paralyzing effect of anxiety upon his ability to act rationally. Excessive rage also makes a person act in a way which is out of harmony with his accepted standards and existing interests. Under excessive emotions behavior becomes irrational; it is directed mainly to relieve the immediate tension irrespective of consequences. The most common examples are the different forms of war neurosis. Also in peacetime, such acute neurotic disturbances are not infrequent. They may assume almost any form: acute depressions, anxiety states, hysterical conversion symptoms, vegetative neuroses, which may develop in otherwise well-adjusted persons when exposed to life situations beyond their capacity to master. In such acute conditions, the primary aim of therapy consists in reducing the intensity of the disturbing emotions by *emotional support* which reduces acute anxiety and confusion. The ego's functional capacity is fundamentally intact and is only temporarily impaired by excessive emotions. In such supportive psychotherapy, sedatives may also be of considerable value. Since in acute emotional situations the ego's perceptive functions—the faculty of clear analysis of the external situation and also the ability to weigh and co-ordinate emotional needs is likely to be impaired, the therapist can help in *giving intellectual insight* by clarification of the emotional issues and existing external circumstances involved. It is important to remember that acute conditions if not treated are likely to become chronic, because the failure to meet actual life situations has a demoralizing effect upon the ego and may mobilize poorly resolved conflict situations of the past. Once the ego fails in one situation, all functions of mastery may break down. This explains why in traumatic neurosis the patient may lose the basic faculties of mastery, such as walking, speaking, in fact all co-ordinated movements, and regress to the completely helpless state of infancy. The regressive tendency is present in everyone, and when life conditions become difficult, the tendency to return to the less responsible and more secure situations of childhood is strengthened. Such regressive evasion of existing difficulties is an integral part of every neurosis and psychosis. Early treatment of acute conditions by restoring self-confidence and thus blocking the more extended breakdown of the integrative function is therefore of primary importance.

Chronic Conditions.—Chronic failures of the synthetic ego functions develop insidiously under the influence of injurious interpersonal relations. The disturbing experiences may start in early childhood or later. Conflicts centering around early sexual and hostile impulses as they appear in the family situation are the most common causative factors. In such cases merely supportive therapy is of little value, and the uncovering types of psychotherapy are indicated. In these, we expose the ego in the treatment situation to the original emotional constellation which it could not resolve in the past. The revival of the original conflicts in the transference situation (the emotional relation to the physician) gives the ego a new opportunity to grapple with the unresolved conflicts of the past. Independent of the form of therapeutic approach—whether it consists of prolonged daily interviews or briefer application of psychoanalytic principles—all uncovering psychotherapy is based on what might be called the principle of *"corrective emotional experience."* The pathological effect of earlier emotional experiences is corrected by exposing the patient to the same type of emotional conflicts in the therapeutic situation. The therapist, however, reacts differently, not as the parents, teachers, relatives, or friends in the past. This difference between the therapist's reaction from the original parental reactions is the fundamental therapeutic factor.

It is important to realize that the new mastery of an old unresolved conflict in the transference situation becomes possible not only because the intensity of the transference conflict is less than the original conflict—is only a "shadow play" of the original conflict—but also because the therapist assumes a different attitude from that which the parent assumed toward the child in the original conflict situation. The therapist's attitude is objective and understanding—that of a physician trying to help a patient. He does not react to the patient's aggression by retaliation or reproach, neither does he gratify the patient's infantile claims for help. In this objective atmosphere of positive helpful interest, the patient not only becomes capable of expressing his original tendencies more

frankly but can also recognize that his reactions are out of date and no longer adequate responses to his present life situation. Once they were in a sense adequate reactions—the reactions of the immature child to existing parental attitudes. In other words, while the patient continues to act according to out-dated earlier patterns, the therapist's reaction conforms strictly to the actual therapeutic situation. This makes the patient's transference behavior a one-sided shadow boxing. The patient has thus a unique opportunity not only to understand, but at the same time to *feel* the irrationality of his emotional reactions. Moreover, the therapist's understanding attitude not only allows the patient to deal differently with his emotional reactions, but makes such a new settlement necessary. The old pattern was not formed in a vacuum —it was the result of the emotional interrelationship between parent and child. In fact, it was an attempt of adaptation on the part of the child to parental behavior. When one link in this interpersonal relationship is changed—namely, the parental response—the patient's reaction becomes senseless. In this difference between the original pathogenic and the therapeutic situations lies the value of the analytical procedure. One must bear in mind that the neurotic patient's attitude is not completely dominated by his neurotic patterns. His attitude towards the therapist is a mixture of adequate reasonable reactions and preformed, rigid, repetitive neurotic behavior patterns. The free permissive atmosphere of the therapeutic situation—and primarily the fact that the patient comes for help to a person who does not judge him —encourages the unchecked expression of neurotic attitudes—particularly of the early dependent tendencies. The analyst, however, does not assume the protective parental attitude which the patient unconsciously seeks. This frustration provokes aggressive feelings in the patient similar to those he felt towards his parents when his unlimited demands were not fulfilled. Dependence mixed with resentment, because the therapist does not gratify these dependent wishes to the extent the patient desires, is the most common basic pattern upon which the individual variations of transference reactions are superimposed. At the same time, the patient, like every neurotic, has reasonable adult attitudes also. This dividedness in his personality is responsible for what one calls the neurotic conflict. His reasonable realistic attitude brought him to the therapist and makes him an ally of the therapist with whom he tries to master his irrational neurotic reactions. And just because the therapist never abandons the realistic therapeutic attitude, the patient's neurotic behavior becomes pointless and one-sided and brings the irrationality of the neurotic patterns into sharp relief.

It is needless to say that if the therapist has the opportunity to advise the relevant members of the patient's environment and instruct them what attitudes to avoid in relation to the patient, the effectiveness of the therapy can be greatly increased. The therapeutic interviews are not the only medium in which the correction of the patient's neurotic reactions takes place. If the patient's environment, following the therapist's instructions, no longer responds to his neurotic patterns in the usual way, the neurotic behavior loses its sense. Now, not only in the transference but also at home or in the office, the neurotic behavior pattern fails to fulfill its unconscious purpose and becomes pointless. Unfortunately, in most cases the therapist does not have such a consistent co-operation on the part of all the persons who play an important role in the patient's life. In the case of neurotic adolescents, parental co-operation, however, is not unusual and often of decisive significance for therapeutic success.

A pedantic classification of therapeutic procedures into supportive and uncovering treatments is not possible, because in practically all therapy both types of approach are used. Even in the classical psychoanalytic treatment, there are important supportive components. The mere fact that the patient is assured that prolonged treatment may help him reduce anxiety. The dependent transference relation constitutes a powerful supportive measure. The outlook of a prolonged treatment allows the patient to postpone the final resolution of his conflicts. This, in itself, is likely to diminish neurotic anxiety. In fact, the supportive component in some therapy may become so powerful that it interferes with the progress of the treatment.

Quite early in his therapeutic experimentations Freud discovered that after a strong dependent transference has been established the patient continues the treatment not primarily to be cured, but to be treated. In fact, he may cling to his symptoms as excuse for the continuation of the treatment. Many of the most recent therapeutic investigations are primarily concerned with the crucial

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The Art of Anesthesia

By J. De Pree, M.D.
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IN RECENT years anesthesia has developed into a most important branch of medicine. Surgery was the first and still is anesthesia's chief field. Here it has accomplished much for the benefit of both patient and surgeon. The work of the surgeon is rendered easier because of greater relaxation and quieter abdominal fields. The patient is safer because the actions of the drugs used are better understood and, therefore, they are used to greater advantage. The surgeon has been relieved of worrying about the condition of the patient and can concentrate upon the work in hand.

Some of the responsibility carried by the anesthesiologist has been thrust upon him, but much of it he has quietly and efficiently assumed because it had evolved upon him with the development of his specialty.

New drugs and new techniques are constantly being developed. The latest development in surgical procedures, such as the operation for patent ductus arteriosus, could not have been perfected without the adoption of anesthesiological techniques for it. Anesthesiology has gone ahead so far and developed so greatly that special training is absolutely necessary. Surgeons are demanding qualified anesthetists. They realize that they can keep up only in a general way with the advances in anesthesiology.

The relief of pain has always been of paramount interest. Articles in lay magazines about painless childbirth, anesthesia, et cetera, are read with interest. The result is that patients know about anesthesia and demand the best and least unpleasant of anesthetics. They are beginning to doubt the surgeon who does not use the services of a qualified anesthesiologist. The patients in every community which has a hospital are entitled to and should receive a real anesthesia service.

The phrase "anesthesia service" is deliberately used because the term anesthesia, or as we prefer —anesthesiology, means more than the mere administration of an anesthetic drug. This service starts the day before, or several days before, the day of surgery. We obtain the patient's history of past and present illness, previous operations and anesthesias. Their reactions or complications are carefully evaluated. A careful examination, particularly of the respiratory and the cardio-vascular systems, is done. In critical cases the surgeon consults us several days before surgery and we follow the patient's course closely and interestedly. The cases are thoughtfully evaluated. The type of anesthetic for each individual case is decided upon by taking into consideration the patient's condition, the pathology, the operation and the needs of the surgeon as to position on the operating table, degree of relaxation needed, and the length of the time required by the surgeon. The patient's desires are respected as far as possible. It is surprising how far we can go today in this respect. If the responses we receive to our visits and examination mean anything, the patients are indeed grateful for this service. They appreciate our interest and are thankful that their surgeon was interested enough to have the anesthesiologist see them before the operation. These pre-operative visits are a great morale builder and leave many patients with a profound sense of relief. The patient knows the anesthetist who is going to put her to sleep and is confident instead of fearful.

The metabolic rate of the patient determines the resistance to the anesthesia. This metabolic rate is influenced by fever, pain, and the emotional state. It is necessary to lower this rate before anesthesia is started. This is done by the use of sedatives and narcotics. Pre-operative pre-medication is essential. Too much causes more trouble than not enough and may produce a serious respiratory depression.

The administration of the anesthetic should be started in a quiet, efficient and reassuring manner. It should be started slowly. The rate of administration is increased as the patient tolerates the drug. As the patient goes down through the first and second stages the concentration becomes high. Finally the patient is in the proper plane of anesthesia. The anesthetic concentration can now be decreased and only enough anesthetic given to keep the patient in the desired plane.

During the operation, the patient's condition is watched carefully and constantly. This condition is revealed by the blood pressure, pulse, respiratory rate, sweating and color. Changes in any of these are noted, and danger signs are carefully watched for and proper remedies immediately instituted.

The accidents of anesthesia are circulatory and respiratory. These accidents will result in death if

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not promptly recognized and corrected. The circulatory conditions are due to increased blood pressure, decreased blood pressure, and ventricular fibrillation. Asphyxia is the greatest source of trouble to the anesthetist. When it is accompanied by cyanosis, it is readily recognized. In the anemic, however, cyanosis is absent and anoxia, or lack of oxygen, may not be detected until great damage has been done. Only a few minutes suffice to cause irreversible changes in the central nervous system. Increased blood pressure may indicate asphyxia.

Decreased blood pressure is usually due to hemorrhage or shock. Here increase in oxygen intake is indicated. Fluids, preferably blood, should be given intravenously. Blood substitutes should be given only until blood is available. During every operation intravenous fluids, 5 per cent glucose in water, should be given. The loss of blood is anticipated and is replaced immediately.

A fall in blood pressure in the third stage of anesthesia may be due to anesthetic shock which is corrected by increasing the oxygen percentage of the anesthetic mixture. When the decrease in blood pressure is not due to hemorrhage, a pressor drug, such as neosynephrin, may be used cautiously. These are best given in small doses and repeated as indicated.

Ventricular fibrillation is a sudden stopping of the circulation with purposeless contractions of the ventricular muscle. Recovery or death results in a minute or two. This accident calls for immediate artificial respiration with oxygen and intermittent pressure on the rebreathing bag. Manual cardiac massage should be promptly instituted.

Respiratory accidents are peripheral and central. The peripheral accidents are obstruction due to foreign bodies, vomitus, etc., swallowing the tongue or spasms—bronchiolar or laryngeal. For obstruction the proper measures are aspiration of vomitus, mucus, etc.; removal of foreign body; and insertion of a proper airway. Vomiting should be prevented by emptying the stomach if necessary, before anesthesia; and by careful induction. The great danger is aspiration of vomitus and the production of a diffuse chemical pneumonitis.

The bronchiolar and laryngeal spasms may usually be prevented by proper pre-medication—atropine or scopolamine. After they have developed, the treatment is attempting to force oxygen into the lungs to prevent anoxia. As the anesthesia lightens the spasm usually is broken.

Central respiratory accidents are failure of the respiratory center. These are caused by incorrect pre-medications, and by too deep anesthesia. The remedy is artificial respiration and introduction of corrective medication.

Postoperatively, the patient is visited daily and examined, as necessary, for the first few days. His subsequent course in the hospital is followed by means of the chart and occasional visits. This postoperative regime adds much to the patient's comfort and often nips a complication in the bud. We insist, whenever possible, that the patient get up out of bed and cough. When a chest shows signs of collecting moisture the patient is rolled on his side and his back is thumped while he coughs. This brings up copious mucus. When necessary, bronchoscopic aspiration is done and many lung complications are cured before they start.

The different anesthetic drugs and types of administration have not been mentioned. Many anesthetists are of necessity confined to the use of ether or chloroform. Some few may also be giving nitrous oxide. Nitrous oxide, however, as well as all the newer anesthetics, will require special equipment and should not be given without special training.

Ether is the anesthetic drug most commonly used today, by the specialist in anesthesiology as well as by the general practitioner. It is 100 per cent potent and has the widest margin of safety of any of our anesthetics. No one need be ashamed of using ether. Unfortunately, its use is not pleasant to the patient. The sense of smothering and the nausea and vomiting postoperatively are too unpleasant. These, however, can be minimized by careful administration. Induction can be accomplished rapidly by using vinethene (divinyl-ether) with the open mask until the patient tolerates ether. Shortly after ether is started, the mask can be partially closed by means of a folded wet towel around the lower part of the mask.

Vinethene should be given slowly and only for a short time. When used for the complete anesthetic, it should not be used for more than twenty or thirty minutes. It works rapidly but has the disadvantage of causing excessive salivation. Occasionally, we have noticed slight convulsions with its use.

Unfortunately, some physicians must operate, or at least deliver a mother in her home. These homes probably are illuminated by oil or gasoline lamps and heated by coal or wood stoves. Here,

ether and other explosive and inflammable anesthetics cannot be used. Chloroform must be substituted. Chloroform is not a safe anesthetic. It causes death in the induction period as well as later by direct action upon the heart. Death may be caused days later by delayed chloroform poisoning. When chloroform is to be given, it must be given slowly and never in strong concentration.

Between the fields where chloroform and ether are the only anesthetics used and the larger medical centers where the highly trained specialists are working, there are the fields where the large majority of the members here today are practicing. You have a hospital to which your patients can be brought for operations or delivery. These patients are your best friends. You cannot let them down by not giving them the best. You are responsible that they get the benefit of the best—in surgery and also in anesthesia.

The newer anesthetics should never be given by anyone not trained in their use. Nitrous oxide, one of our oldest and safest anesthetics, can get an untrained person into trouble faster than he may realize. Pentothal sodium is one of the most pleasant anesthetic drugs we have. It has removed the fear of surgery from every woman who has received it, and patients having heard another describe it, request it. No doctor has the right to use any drug unless he knows how to use it. This is especially true with anesthetic drugs, and pentothal sodium is no exception.

Curare is not an anesthetic drug but is used by anesthesiologists to produce relaxation. By means of this drug, sufficient muscular relaxation can be obtained without pushing the anesthesia to the limit. If pushed too far, curare will paralyze the muscles of respiration; the intercostals are affected first, and finally the diaphragm. This causes death by asphyxiation. The heart is not affected, and the patient can be kept alive if the anesthetist breathes for him by means of artificial respiration. Prostigmine, intravenously, is antagonistic to the action of curare and very beneficial in overdosage.

Spinal anesthesias are not nearly so numerous in our practice as they were four or five years ago. They have been superseded by pentothal sodium and nitrous oxide with the help of curare to produce sufficient relaxation.

The anesthesiologist is frequently called upon to perform a saddle block for a patient in labor. It is a great boon for the long, difficult labors, and for malposition and other operative deliveries. The zone of anesthesia must not be higher than D10—about halfway between the symphysis and the umbilicus.

Not only is anesthesia invaluable to the surgeon and obstetrician, but it is rapidly proving a great aid to the internist. More and more is the anesthesiologist called upon to perform therapeutic and diagnostic blocks of various kinds.

Intercostal blocks for postoperative pain; cervico-thoracic sympathetic blocks, lumbar sympathetic blocks and paravertebral blocks are among the most frequently requested.

No attempt has been made to go into detail about any anesthetic or technique. It would be presumptuous to attempt to teach you by means of a paper the intricacies of any type of anesthesia or nerve block. An attempt has been made to describe the art of anesthesiology, and how it would be of benefit to every community. Not all anesthesiologists can confine their practice 100 per cent to anesthesiology. This is not necessary and the smaller communities would be greatly benefited by qualified part-time men.

The pouring of ether or chloroform is about the least part of anesthesia. The maintenance of the proper balance of anesthetic drug, oxygen, and carbon-dioxide is of paramount importance. The knowledge of the action of his drugs, the cooperation with the surgeon in giving him the proper relaxation, and bringing the patient safely through his operation by the correct interpretation of the revealing signs is the art of the anesthesiologist.

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JMSMS

Ellington X. Zilch, a captain in the First World War, came out of the service with the idea of getting into business for himself and making good. He had gone to high school and business college and everybody said he was a fine young man because he worked very hard, satisfied his customers, saved his money and put his profits back into his enterprise.

He was too busy keeping his business going to think much about politics at the time. But, after the New Deal came into power, his family noticed that he acted strange at times, insisting that he could not think right.

He wanted to know why the Roosevelt Administration was burning crops and killing off pigs if people were hungry. They explained to him that was done to create a scarcity so that prices would rise and then everybody would have plenty to eat.—*Detroit Free Press.*

Impending Death under Anesthesia

By Max Thorek, M.D.
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UNLESS circulation is restored, with supply of oxygen to the brain within three or four minutes at most, irreparable damage to the higher cerebral centers is inevitable. Even if the patient does not die, he may become demented, paralyzed or blind. Therefore the selection of the anesthetic, skill of the anesthetist, and the knowledge, competence and decision of the operating surgeon are keynotes to success.

The introduction of spinal anesthesia, despite its undeniable advantages, involves risk of cardiac arrest. Varying figures are given by different authorities as to mortality rate among patients with spinal anesthesia. Sise gives it at 1 to 100; Babcock at 1 in 10,000. Probably the truth lies somewhere between the two extremes.

Death's greatest incidence is in aged persons, persons rated as "poor operative risks" and Negroes. For young, healthy persons this type of anesthesia apparently presents no greater hazard than any other.

Inadequate, indecisive and retarded action by the surgeon has already caused the death of too many patients. Only by being always in readiness, having at hand the necessary instruments and supplies, and by making oneself familiar with the needful procedures through previous rehearsal can the number of fatal terminations be reduced to a reasonable figure.

Cardiac and respiratory arrest may be (1) reflex, due to vagovagal stimulation; (2) traumatic, due to injury of the heart or pericardium during operation; (3) the result of functional abnormality, e.g., ventricular fibrillation due to an oversupply of epinephrine, whether this is injected or oversecreted by the adrenal glands, or (4) induced by faulty selection of an anesthetic or an overdose of any such agent.

The principal signs and symptoms of cardiac arrest are (1) stoppage of breathing, (2) disappearance of pulse beat, blood pressure and cardiac sounds, (3) absence of bleeding in the operative wound, and (4) pallor or cyanosis. If anoxia is far enough advanced, the pupils may be dilated. The stoppage of respiration is usually the initial symptom.

As a prophylactic measure to prevent overstimulation of the vagus nerves, atropinization or blocking of the afferent stimuli by means of a local infiltration anesthetic has been suggested. For cardiac arrhythmia caused by trauma near the pulmonary hilus, 10 c.c. of 1 per cent procaine hydrochloride solution, administered intravenously, is recommended by some surgeons. Some doubt does exist as to the advisability of applying procaine directly to the heart.

In cardiac arrest, speed is the first and greatest requisite of success. The first step is to answer the question: Has the heart actually ceased to beat?

If cavities are not open, opening of thorax is fully justified. Time is all important; diagnosis must be made quickly. If the heart has actually stopped or is fibrillating, institute cardiac massage instantly. If pulse is merely reduced to extremity of weakness, little harm has been done.

For diagnosis without direct visualization of the heart itself, prick the auricle first. This can be accomplished in the "twinkling of an eye" by thrusting a needle into the third right costal interspace at the upper rim of the fourth rib, close to the sternal border. Direct needle upward. If this fails, cardiac massage should be instituted at once.

Sir Leonard Hill has pointed out: "The cortex can be kept from death by the merest trickle of blood." Resort to some form of artificial respiration. (Artificial respiration should always be discontinued while an incision is being made, to avoid serious trauma.)

"Blue asphyxia" is chiefly respiratory; first essentials in its treatment are to clear the airway, pull the tongue forward, administer oxygen, remove any impaction of the epiglottis with finger.

Give artificial respiration directly or indirectly. Indirect method is rhythmic pressure on lower thorax. If ineffective, discontinue after one minute. Resort to Silvester's artificial respiration systematically and symmetrically.

Direct artificial respiration (transpiration) may be induced by the "Elisha method" ("and he put his mouth against his mouth"). A piece of gauze is placed over the patient's mouth and gently blown through, with patient's nose pinched and his chin pulled forward. This should be repeated

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every four or five seconds until normal, rhythmic respiration is restored. Automatic artificial respiration is most effectively achieved by means of intratracheal tube. Other possibilities are (a) use of modern anesthetic machine to supply a high percentage of oxygen and (b) injection of alphalobeline. Stretching of the anal sphincter should be done only when anesthesia is light and the patient "refuses to breathe" but has full, bounding pulse. It has a distinct but limited field of usefulness.

Aspiration of vomited material is serious if not attended to at once. Hamilton Bailey says, "A patient who inspires vomitus always dies; not necessarily at the time, but later, from bronchial pneumonia." Under these conditions employ the following measures: (a) use force of gravity by tilting the whole table; (b) direct aspiration of fluid from pharynx by laryngoscope method; (c) when urgently indicated, aspiration through laryngotomy or tracheotomy. This last may be a lifesaving measure in some cases. These measures should be adequate to overcome "blue asphyxia" is most cases.

"White asphyxia" is of truly cardiac origin. Danger therefore is far greater. Cardiac massage must be resorted to at once. The standard method of cardiac massage is to open the upper part of abdomen in the midline from xiphisternum, large enough to admit the right hand. With the heel of the left hand pressing downward from the outside, the fingers of the right hand can exert effective pressure on the ventricles through the diaphragm. For approximately thirty seconds these intermittent movements should be quick and strong. A single contraction of the heart should never be considered a victory. All too often it is not followed by another contraction unless the surgeon continues his efforts without ceasing. A few more compressions, however, will usually suffice to induce continuous automatic action of the heart.

Nicholson's method differs from standard methods chiefly, in that a buttonhole incision is made immediately in the diaphragm behind the xiphisternum. The surgeon's thumb is passed through the opening, and massage accomplished by compressing the ventricles in much the same manner as one would squeeze the bulb of an atomizer.

Lampson's intercostal approach consists of an incision in the fifth intercostal space, opening directly into the pleural cavity. First two fingers of the surgeon's left hand are inserted and massage is performed by compressing the ventricles against the sternum at a rate of about one compression per second.

Ether convulsions may be due to (1) overheating, (2) overoxygenization and cerebral congestion, (3) action of certain streptococci (organisms isolated by the Mayo group from throats of patients with ether convulsions have been proved capable of causing convulsive seizures in experimental animals). Treatment: (a) carbon dioxide and oxygen inhalations, to be continued even after convulsions have ceased; (b) prompt intravenous injection of sodium pentothal (3 to 5 c.c.); (c) injection of lobeline (Bailey), and (d) lifting of the patient to a sitting position before pentothal is given (A. Smith).

Collapse of the patient under intravenous anesthesia: Antidote: intravenous injection of solution of picrotoxin 1/1,000 (1 mg. of picrotoxin acts as an antidote for 30 to 40 mg. of pentothal).

Collapse of patient under spinal anesthesia: Place in steep Trendelenberg position. Raise blood pressure (methedrine).

The innervation of the heart and pericardium is of utmost importance in this connection. The nerves of the pericardium include fibres from the phrenic nerves, especially the left one, also probably from the cardiac plexus. The return of regular sinus rhythm in a case described by Touroff and Adelman occurred suddenly on clamping and traction of the pericardium. This, in their opinion, was not coincidental or fortuitous, but indicative of a possibility that these processes provided some potent stimulating reflex that induced prompt cardiac action. The nature and pathway of this reflex merely can be assumed. Coffey and his co-workers have described a pathway from the pericardium via the phrenic nerve to the superior sympathetic cervical ganglion, and it is possible that a powerful stimulus, traversing this pathway, served to initiate cardiac action. It is not at all unlikely that the opening of the pericardium in my case similarly initiated cardiac function through reflex stimulation.

In fibrillation, cardiac massage *per se* will not only fail to correct the condition but may actually aggravate it. Beck and his associates use an electrical device to shock and defibrillate the heart. Procaine hydrochloride has been advised as an adjuvant to electrical defibrillation. Mautz showed

that the intravenous use of procaine hydrochloride, combined with electrical shock, restored a co-ordinated beat in practically all experimental animals with ventricular fibrillation, whereas electrical shock alone was successful in only half the animals. It is recommended, therefore, that in the absence of a defibrillating apparatus procaine hydrochloride and cardiac massage be employed in combination, the former by intra-auricular injection.

The prognosis of cardiac and respiratory arrest is uncertain.

Report of Case

A married woman, aged twenty-three, was admitted to my service at the American Hospital for chronic appendicitis. She underwent operation on June 25, 1948. Prior to the administration of an anesthetic, her blood pressure in millimeters of mercury was 120 systolic and 80 diastolic. Premedication included the administra- of 1½ gr. of nembutal two hours before operation and ⅛ gr. of morphine sulphate with 1/200 gr. of scopalamine one hour later. Except for the appendicitis, the patient showed no evidence of organic disease.

Spinal anesthesia was employed, 14 mg. of pontocaine with 1 c.c. of 10 per cent dextrose solution being injected into the subarachnoid space at the level of the third and fourth lumbar segments. The anesthesia reached the level of the eighth thoracic segment (the anesthetist stated afterward that it could not have risen above this level).

On the table, the patient appeared apprehensive and was restless and unco-operative. Pentothal sodium in a 0.4 per cent solution was started intravenously in the ankle vein, beginning not less than ten minutes after administration of the spinal anesthetic. (The routine procedure in this hospital is to give just enough pentothal to keep the patient asleep; the drug is not used to supplement the anesthetic. If spinal anesthesia proves inadequate, nitrous oxide or cyclopropane is used as a supplement.) A total amount of 0.35 gr. of pentothal was administered by the continuous drip method over a period of three to five minutes. During this time, the blood pressure was 100 systolic and 60 diastolic; one minute later, these values dropped to 60 and 0 respectively. The pentothal was discontinued and the blood pressure checked again; it showed 40 systolic and 0 diastolic. In another half minute the systolic pressure had also disappeared.

The patient was still breathing shallowly but with apparently fair exchange. Her face was livid, and no carotid pulse could be felt.

Administration of pure oxygen by mask was started at once. The drapes were removed (the operation had not yet been started), and a check was made for the aortic pulse, without result. I immediately made a left superior rectus incision, opened the diaphragm and began cardiac massage. At the same time I ordered an intracardiac injection of epinephrine (0.5 c.c., 1/10,000). Massage had been continued for between five and six minutes before the heart resumed spontaneous activity. During this time the patient, whose respirations had now also ceased, was intubated, and artificial respiration with pure oxygen was begun. Five per cent dextrose in water was started in the foot and set to run as rapidly as possible. When the heart action was firmly re-established, appendectomy was carried out through the incision already made. (Total time of cardiac arrest was nineteen minutes.)

After the operation, the patient remained in deep coma for four days. There was no response to noxious stimuli. The patient's pupils were dilated and fixed. A classic Magnus-de Kline phenomenon was present, and there was also a continuous bilateral Babinski sign. On the day of the operation, one gained the impression of cortical degeneration secondary to cerebral anoxia. A bilateral stellate block was performed and was repeated on each of the two following days.

On the first postoperative day, a spinal puncture was performed, yielding clear, normal fluid under a pressure of 280. At this time, the coma seemed even deeper. The pupils were smaller, and the Magnus-de Kline phenomenon was absent.

On June 28, though still in coma and not responsive to stimuli, the patient did not seem quite so oblivious as before. The eyes were open, with the pupils wide, round, equal and reactive to light. The fundi were normal. There was no sucking reflex. The head could be moved freely; no stiffness of the neck was observed. The arms and legs were held in an extended position. Occasionally, the legs stiffened and the feet went into a tonic equinovarus position. Deep reflexes were present in all four extremities. There were no pathologic reflexes in the arms, but a Babinski sign could easily be elicited on either side, though it was more marked on the right.

On June 29, the patient's condition grew worse. She was very weak and pale. Her lips were cyanotic and her respirations shallow. She vomited repeatedly.

However, on the next day, June 30, her sensorium was slightly clearer. She responded to her name by opening her eyes and trying to fix them upon the examiner, but her gaze was extremely tired and distant. The hypertonicity of the extremities had disappeared. There was no increase in the deep reflexes, but the Babinski sign was still marked on both sides.

On July 2, there was a definite if slight improvement in her general condition. She was less lethargic and seemed to understand simple orders. She could follow an object with her eyes in all directions, and there was no nystagmus. She protruded her tongue normally at command. She could move her arms and legs voluntarily, though feebly; the left arm wavered. She also made efforts to raise her body. She was still unable to speak or to repeat vocal sounds. All the deep reflexes were markedly decreased, but the bilateral Babinski sign was still present.

On July 3 and 4, her condition continued to improve. She regained full consciousness, appeared to understand what was said to her and smiled on appropriate occasions. Motor weakness was still marked in the extremities. The reflexes were unchanged.

By July 9, motor power in the legs had improved considerably, but the arms were still very weak. The finger-

nose test revealed definite disturbance in co-ordination on the left side. She was still unable to talk, but for the first time succeeded in repeating some vowel sounds and a few simple, one-syllable words in a low, tired voice. By July 12, she was able to utter complete, correct sentences, though her speech was still far from normal (scanning, slurred and indistinct).

July 14 found her able to walk with assistance, though her gait was staggering and insecure and she kept her gaze on the ground. Babinski and Gonda signs were marked on the left side but had become less pronounced on the right.

From this time on, the patient's progress was steady. Her gait improved; she could use her arms better, though both arms and hands were still very weak. There was bilateral adiadochokinesis, and both the finger-nose test and the heel-knee test gave faulty results. Her articulation improved very slowly. Amnesia was present, dating from the morning of her admission to the hospital; her most recent memory was of having been in her doctor's office, and even this she remembered only as a fact, being unable to recall the scene. Her handwriting remained extremely shaky, and she was unable to write anything but single letters. On the other hand, she solved simple arithmetic problems promptly and accurately. The Babinski sign disappeared from the right side.

On July 27, the patient's condition was so much further improved that her discharge from the hospital was considered. She was able to walk alone and was steadily gaining in strength. The objective neurologic signs were aproximately the same, but the deep reflexes were more nearly normal and the Babinski sign on the left was now equivocal. On discharge from the hospital, her mental condition was still somewhat befogged and her speech still hesitant, but thereafter improvement was constant. By November, the finer movements of the extremities were completely restored, and her speech was practically normal. She was then two and a half months pregnant, her gestation proceeding without untoward manifestations of any kind.

During the course of her pregnancy, gestation was perfectly normal. Her delivery was normal. No anesthetic was used. The child was male, and was healthy.

Comment

There is mounting evidence that cardiac and respiratory arrest under anesthesia is amenable to control under proper conditions and with adequate technical skill. Recent contributions covering either case reports or physiologic and technical studies, or both, have been made by Lampson, Bailey, Adriani, Dripps and his associates, Kirgis and Reed, McLeod and Schnipelsky, Nicholson and Ruzicko, Thompson and his associates, and Davis.

Charlewood in 1948 reported a case in which he introduced a modification of the standard technique for cardiac massage. His patient did not recover, but he expressed the opinion that this modification, since it did produce temporary pulsation when regular massage had failed, may have its uses. It consists of stroking the heart firmly downward with two fingers, thus imitating the path of the normal impulses passing down the bundle of His.

Stage in 1949 reported three cases of cardiac arrest, one of them in detail. Two of the patients died; the third recovered. Stage regards the anesthetist as responsible for the diagnosis and emphasizes the importance of having suitable equipment, including endotracheal apparatus, always at hand.

The duration of the period of arrest after which the patient may recover remains an open question. Touroff and Adelman recently (1949) reported a case in which the patient was resuscitated and recovered fully after an arrest lasting forty minutes. They expressed the opinion that cardiac message is the prime factor in maintaining life until spontaneous heart action is restored. In proof of its importance they cite Gunn, who has shown experimentally that a dye injected into the right ventricle during arrest will appear in the lungs and in the carotid artery with only a few compressions of the heart. They refer to the work of Dripps and his co-workers, who stated that cardiac massage skillfully performed can produce a systolic blood pressure of 60 to 70 mm. of mercury.

This is sufficient to demonstrate the importance of cardiac massage, for, as Touroff and Adelman have pointed out, it indicates the possibility that cerebral circulation can be thus maintained, warding off irreversible cerebral damage due to anoxia or reducing it to a minimum. The importance of early massage cannot be overemphasized, for only by such prompt treatment may one hope to combat the damaging effects of hypoxia on the central nervous system. The first five or six minutes are critical (Weinberger); after that interval, irreparable cortical and medullary changes will appear. Delay of more than five minutes in starting massage is hazardous (Bailey and Nicholson). "Procrastination," say Touroff and Adelman, "constitutes a serious error in the management of these emergencies. In our case, we were fortunate in having the heart under direct observation at all times, so that no moments were lost. . . . The sequence of events thereafter indicates clearly the effectiveness of cardiac massage, and we attribute the successful resuscitation of our patient primarily to the latter."

Second in importance to cardiac massage is artificial respiration, which implies "rhythmic insufflation of the lungs, preferably through an endotracheal tube, at the rate of 24 per minute and at pressure not exceeding 15 mm. of mercury." Artificial respiration has a twofold function: to oxygenate the blood in the pulmonary vessels and to aid in maintaining the general circulation.

A case of complete recovery after cardiac arrest of twenty minutes' duration was reported by Adams and Hand in 1942. Studies and experiences in this and related fields have been contributed by the following authors, among others: Weeks and Van Hoy, Volpitto and his co-workers; Barber and Madden; Prevost and Battelli; Eastman and his collaborators and Fauteux.

Summary

1. The arrest of cardiac and respiratory action is a complication—fortunately a rare one—of the administration of anesthesia, particularly spinal anesthesia.

2. The constantly and rapidly increasing employment of spinal anesthesia makes it imperative for all who operate on patients under its influence to be prepared to deal with this gravest of all complications should it arise. An emergency outfit should always be at hand, and a prior rehearsal of the entire operating team should make each member familiar with his part in preventing a fatal outcome.

3. When the abdominal or the thoracic cavity has already been opened, the surgeon can reach the heart directly. If no such opening exists, he is justified in opening the thorax and, if he finds the heart stopped or fibrillating, he should begin cardiac massage without an instant's delay. Speed is the indispensable requisite of any procedure dealing with cardiac arrest.

4. Three methods of cardiac massage are described—the standard method, the method of Nicholson and the intercostal approach recommended by Lampson. The third method is useful in the treatment of ventricular fibrillation when complete cardiac arrest has not occurred.

5. Other anesthetic complications, such as ether convulsions and collapse of the patient under intravenous or spinal anesthesia, are discussed.

6. The case is reported of a young woman about to be operated on for chronic appendicitis under spinal anesthesia (pontocaine) with intravenous pentothal sodium injection beginning ten minutes after injection of the spinal anesthetic. Within seven minutes the blood pressure fell to zero and no carotid pulse could be felt. The diaphragm was opened through a left superior rectus incision and cardiac massage instituted, accompanied by intracardiac injections of epinephrine. These were continued for more than five minutes, after which the heart resumed its beat. Cardiac action was arrested for nineteen minutes from the time the last pulse beat was felt until heart resumed its action. Appendectomy was then performed through the original incision, while the patient remained in deep coma. The coma persisted for four successive days, and observers gained an impression of cortical degeneration secondary to cerebral anoxia. On the sixth day the coma lightened; there was some response to stimuli, and the sensorium was slightly clearer. General improvement continued thereafter, permitting the patient's discharge at the end of a month. She later gave birth to a healthy male child.

7. The importance of reflex action through the pathway from the pericardium via the phrenic nerve to the superior sympathetic cervical ganglion is emphasized.

MSMS

I lament that I find in me no enthusiasm, no resources for the instruction and guidance of the people, when they shall discover that their present guides are blind. This convention of Education is cold, but I should perhaps affect a hope I do not feel, if I were bidden to counsel it. I hate preaching, whether in pulpits or in teachers' meetings. Preaching is a pledge, and I wish to say what I think and feel today, with the proviso that tomorrow perhaps I shall contradict it all. Freedom boundless I wish. I will not pledge myself not to drink wine, not to drink ink, not to lie, and not to commit adultery, lest I hanker tomorrow to do these very things by reason of my having tied my hands. Besides, man is so poor he cannot afford to part with any advantages, or bereave himself of the functions even of one hair. I do not like to speak to the Peace Society, if so I am to restrain me in so extreme a privilege as the use of the sword and bullet. For the peace of the man who has forsworn the use of the bullet seems to me not quite peace, but a canting impotence; but with knife and pistol in my hands, if I, from greater bravery and honor, cast them aside, then I know the glory of peace.

It was a fine corollary of Stoicism that Aristotle said that the honor of chastity consisted in self-sufficiency.—Emerson.

Ophthalmia Neonatorum

By W. L. Benedict, M.D.
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THE DISEASE known as ophthalmia neonatorum, or inflammation of the eyes of the newborn, is caused by certain bacteria which find entrance into the eyes of babies at birth or shortly thereafter. The bacteria most often demonstrated by smear and culture are gonococci (in 30 to 60 per cent of the cases) streptococci viridans, staphylococci and both Gram-negative and Gram-positive organisms of various kinds. The infection causes acute inflammation of the conjunctiva with marked swelling of the eyelids, blennorrhea and corneal ulceration which destroys the sight unless treatment can be instituted within a few hours of its appearance.

Crede, in 1881, showed that the routine application of 1 per cent silver nitrate solution would eliminate ophthalmia neonatorum. Dr. Lucian Howe of Buffalo, New York, in 1887, called the attention of the New York State Medical Society to contagious ophthalmia, and through his efforts the New York State Legislature passed a bill in 1890 requiring midwives to report cases of ophthalmia neonatorum to their local health officers. Other states soon passed similar laws, but this infection continued to make babies blind. As late as 1906-1907 ophthalmia neonatorum was responsible for 28.2 per cent of new admissions to schools for the blind.

In 1908, the New York State Committee for the Prevention of Blindness was formed. In 1915, it became the National Committee and ultimately was renamed the National Society for the Prevention of Blindness. This society immediately set about to lessen the number of cases of ophthalmia neonatorum by urging the use of the Crede method of prophylaxis.

Prior to the inauguration of the campaign sponsored by the New York State Committee for the Prevention of Blindness against ophthalmia neonatorum in 1906-1907, of all those who were admitted to schools for the blind, 28.2 per cent had lost their sight from this cause alone. Real achievement has been accomplished over the years with a reduction to 2.9 per cent among new admissions to schools for the blind in 1945-1946. During 1947, nearly 1,200 cases of ophthalmia neonatorum were reported in the United States compared to a median of 1,627 for the years 1942-1946. Despite the reduction from 28.2 per cent to 2.9 per cent, much remains to be done besides distributing ampules of silver nitrate and enforcing the law. Each case of ophthalmia neonatorum should be investigated to ascertain why it occurred. Only by information thus obtained may we judge the need of revision of existing regulations or additional control procedures. In a recently made nation-wide survey, it was shown that there was a delay of one week or longer in reporting to the health officer 21 per cent of the cases, and there was no information on outcome as regards vision in 2,002 out of a total of 3,000 cases. In New York City, for the five-year period 1931 to 1936, only twenty-three cases of ophthalmia neonatorum were reported to the department of health. An investigation of 192,478 births during this period revealed that there were actually 1,344 clinical cases of ophthalmia neonatorum, among which 141 were proved to be gonorrheal.

It is of interest to note that in Minnesota, in 1941, infectious diseases were the etiologic cause in 31 per cent of the total causes of blindness among recipients of aid. Ophthalmia neonatorum accounted for 4.7 per cent. In the State of Michigan, the cases of ophthalmia neonatorum reported to the State Department of Health have shown a decrease from seventy-eight in 1944 to twenty in 1949. However, in 1943 only five cases were reported. The exact incidence of ophthalmia neonatorum can hardly be estimated on the basis of reported cases, but it is quite likely that all severe cases of gonorrheal ophthalmia neonatorum are reported to local health authorities.

The earliest efforts of the National Society for the Prevention of Blindness were directed toward the adoption of the Crede method of prophylaxis against a disease of infectious origin that was causing the blindness of thousands of babies in this country each year. Medical societies were implored to urge that all babies wherever delivered, whether by physician or midwife, be protected against the probability of blindness by having the eyes carefully cleansed and a single drop of a freshly prepared 1 per cent of silver nitrate

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From the Section in Ophthalmology, Mayo Clinic, Rochester, Minnesota.

dropped into the conjunctival cul-de-sac. The solution of silver nitrate is prepared under the auspices of the state departments of health and supplied in wax ampules for use by physicians and midwives in all deliveries. In some states, laws were enacted making compulsory the use by physicians and midwives of some accepted form of prophylaxis and placing gonorrheal ophthalmia on the list of reportable diseases. Wisconsin, in 1909, was the first state to require prophylactic use of silver nitrate in both eyes of *all* newborn babies. Some form of regulation is now required in all states either by law or by the state board of health, although the regulation unfortunately is often weakened by various restrictions. To the practice of the Crede method of prophylaxis may be accredited the great decrease in the number of reportable cases of ophthalmia neonatorum and also the decrease in the blindness that occurred among those few in whom the disease was started but immediately treated according to the accepted method. There has been no doubt that the incidence of reportable cases of gonorrheal ophthalmia could have been made lower still if the use of the solution of silver nitrate could have been more completely adopted, but unfortunately there were those, both physicians and midwives, who refused to use it or who thought that in certain cases its use was not indicated because there was no gonorrhea in the mother at the time of birth.

While it is recognized that the greater number of severely infected corneal ulcers of babies that lead to blindness have been due to gonococci there remains a goodly number (40 per cent) of the total that carried infection by streptococci, staphylococci, and a host of other organisms that might have been killed or rendered harmless by a single instillation of a 1 per cent solution of silver nitrate, but because their presence was not known or was regarded as harmless many babies were not given the advantage of prophylaxis and consequently became blind.

Silver nitrate in one per cent solution is known to be harmless to the delicate tissues of the eye and at the same time known to be lethal to the organisms that gain entrance to the babies' eyes at the time of birth. The instillation of the solution usually causes a mild irritation of the conjunctiva with increased mucoid secretion, but after a day or two at most these symptoms subside. It has often been observed that the same symptoms are present and sometimes last for several weeks in cases where no prophylactic or antiseptic has been used. The offending organisms often are difficult to demonstrate by smear or culture, and the inflammation may persist in spite of treatment. These are exceptions to the rule but do not constitute a reasonable objection to the use of silver nitrate, inasmuch as it is known to be harmless when properly used. However, there has been maintained a subtle endeavor to minimize the urgency of ophthalmia neonatorum prophylaxis. In some quarters a definite antagonism to the employment of silver nitrate solution has arisen on the grounds that in some cases it has been found to be ineffectual and in others definitely harmful. Attention has been directed to reports of accidental injury to the eyes of babies by instillation of a solution made too strong and by instillation of other drugs by mistake. Such accidents were reported mostly from the maternity wards of large hospitals and reflect more the lax supervision of the staff than the value of the treatment when properly given. Many large hospitals report hundreds of successive births with proper application of the Crede method of prophylaxis without the occurrence of a single case of gonorrheal ophthalmia and not a single case of harm to the eye by instillation of silver nitrate.

For many years, until the discovery of the antiseptic properties of the sulfonamides, about 1935, silver nitrate was the only prophylactic agent widely used. In spite of the fact that the Crede method of prophylaxis was not universally used, the incidence of blindness due to ophthalmia neonatorum steadily declined as the prophylactic measures became more widely adopted throughout the United States, and the treatment of gonorrheal ophthalmia has been markedly improved by the use of sulfonamides and antibiotics.

With the introduction of the sulfonamides, new drugs for the treatment of gonorrhea were found, drugs that were bacteriostatic rather than bactericidal. They were found to be quite effective in the treatment of gonorrheal ophthalmia and were advocated as prophylactic agents. That there was great merit in the use of the drugs was easily demonstrated and widely accepted, but limitations were soon discovered. One after another of the sulfa drugs were tried, and most of them were found to be effective in the treat-

ment of ophthalmia neonatorum due to some bacteria and not so effective in others. The drugs exhibited a selective affinity for Gram-negative or Gram-positive organisms, some of which developed a tolerance to the drug, and repeated applications were required to keep the infection under control. The use of antibiotics in the mother some days before delivery was considered effective treatment of her infection and at the same time provided sufficient prophylaxis for the baby. Careful and adequate prenatal treatment undoubtedly has reduced the incidence of venereal disease among the mothers and aided in the prevention of ophthalmia neonatorum of all etiological sources. By some obstetricians the use of antibiotics has superseded the instillation of silver nitrate solution and the use of sulfa compounds shows even more favorable results. In ophthalmological circles, it has been suggested that the use of the Crede method of prophylaxis be abandoned and that state laws requiring the use of silver nitrate solution as a prophylactic agent be changed to permit the use of any other prophylactic agent selected by the person in charge of the delivery. There are two points of importance in this suggestion: first, the alleged damage to the delicate structures of the eye by silver nitrate, and second, the assumption that some other drug will be equally or more effective as a prophylactic agent, as practical from the standpoint of distribution to physicians, nurses and midwives, and less likely to do harm to the eyes.

First, consider the charges of damage to eyes by use of silver nitrate. In the literature on the subject of ophthalmia neonatorum, instances of opacities with severe burns of the cornea caused by use of silver nitrate as a prophylactic measure are reported. In nearly every instance of severe damage, a solution of silver nitrate much stronger than that recommended by the Crede method has been employed. Mistakes in compounding the mixture and mistakes in the selection of the bottles containing the proper strength of solution are blamed for the accident. It has been a common practice for physicians to carry in their bags a solution of 50 per cent silver nitrate for cauterizing of the stump of the umbilical cord. The error occurs when the physician, nurse, or midwife takes drops from the bottle containing 50 per cent solution of silver nitrate rather than from bottles of 1 per cent solution especially prepared for instillation in the eye of the newborn babe. Such accidents can be avoided by the use of a silver nitrate stick for cauterization of the stump of the umbilical cord rather than a 50 per cent solution of silver nitrate. A much better way to avoid such mistakes, however, is the use of wax ampules, each containing enough silver nitrate in 1 per cent solution to be instilled in the eye of the newborn babe. It has become common practice in this country to use the wax ampules.

Another critcism of the Crede method of prophylaxis has to do with the difficulty of instilling drops of silver nitrate solution into the eye of the newborn babe. Some writers speak of the inability to open the eyes so that the solution can be instilled into the cul-de-sac, of the damage to the eye by attempts to evert the eyelid, and even the neglect to use the eye drops because of the urgency to the physician, nurse and other attendants to avert a crisis either for the baby or the mother. The difficulty of a single instillation of silver nitrate solution from a specially designed wax ampule containing just enough of the solution for one application cannot be more than that of making multiple instillations, one each minute for thirty minutes, for a solution of penicillin to be followed by instillation of penicillin once daily for four days. That is the practice in some large maternity hospitals where penicillin has been substituted for the Crede method of prophylaxis. The complaint has been made that the instillation of silver nitrate solution into the eyes of babes usually is followed by an increase in secretion, that is, a blennorrhea, usually mild, and some swelling of the eyelids. Normally, the blennorrhea continues for two or three days but in some instances for several weeks. This is due partly to chemical action and partly to reinfection by bacteria, and partly to a virus. The latter cause is not influenced by the use of any known prophylactic and does not yield satisfactorily to any form of treatment. Fortunately, the reaction and discharge subside without serious sequelae.

As a bactericidal agent, silver nitrate is effective against the gonococcus, staphylococcus, streptococcus, the colon bacillus, and some other organisms. The accepted practice is to cleanse the eyes as soon as possible after birth with a saturated solution of boric acid or 10 per cent

sodium chloride solution and follow this with a single instillation of two or three drops of a 1 per cent solution of silver nitrate. Evidences of infection that appear three to five days afterwards are to be looked upon as reinfections rather than failures of the prophylactic instillation. The treatment of such cases will be referred to later.

There is no justification on the basis of therapeutic activity to infer that the proper use of the Crede method of prophylaxis is not efficient and practical, as its value has been established by many years of use. The hazards connected with the use of silver nitrate are not inherent in the drug but in the frailties of those who use it.

The persistence of ophthalmia neonatorum raises the question whether obstetricians are as alive to the possible danger of the many varieties of antenatal infection in the mother as they are to the considerably less common danger of maternal gonorrhea. If we consider the two components of the Crede method of prophylaxis, that is, the aseptic and the antiseptic, greater emphasis is placed by some on prophylaxis by asepsis, that is, antenatal treatment of the mother by the Crede toilet to prevent infection from entering the eye of the newborn baby. Undoubtedly, a combination of both methods of the Crede treatment would result in a still lower percentage of infected babies' eyes.

The second point of the proposed change in laws and requirements regarding prophylaxis against ophthalmia neonatorum concerns the effectiveness of a substitute for silver nitrate solution. Striking results in the treatment of ophthalmia neonatorum with the sulfonamides gave rise to the thought that their use may also be as effective in prophylaxis. Consequently, in many hospitals sulfanilamide and its related compounds have been extensively used. In some institutions the instillation of silver nitrate in the eyes has been combined with the systemic use of sulfonamides, and some studies have included only cases that were treated systemically by the sulfonamides and/or antibiotics. In the treatment of ophthalmia neonatorum, sulfanilamide itself proved rather erratic and more was hoped from sulfapyridine with its greater selectivity for the gonococcus, the casual organism in some 30 per cent of cases. In practice, sulfapyridine proved remarkably effective in all types of ophthalmia neonatorum in the stapylococcal no less than in the gonococcal type. It has been said that the results in ophthalmia neonatorum are so uniformly good that bacteriological examination to establish the identity of the causal organism is almost superfluous. In all clinical cases, a cure may now be expected in as many days as weeks were formerly needed.

Studies of the relative value of sulfanilamide, sulfapyridine, sulfamezathine, and sulfathiazole and sulfadiazine in the treatment of ophthalmia neonatorum show that the effective power of the drugs is essentially the same, but sulfanilamide itself and sulfapyridine are less desirable than sulfamezathine and sulfathiazole and sulfadiazine, as they tend to give toxic symptoms rather more frequently. They have all now been replaced by sulfacetimide in 30 per cent solution and in 10 per cent ointment to be applied directly to the eye.

Penicillin has been found to be the most effective drug against gonorrheal ophthalmia of all the antibiotics, but it is found to be effective only when applied in high concentration and at frequent intervals. "In a series of 104 cases treated (by Sorsby[1]) initially at intervals of one minute for half an hour (with drops in concentration of 2,500 units per ml. in seventy-one cases and a concentration of 10,000 units per ml. in thirty-three cases), the average total time of treatment was thirty-eight hours. This, however, applies to only seventy-seven of the 104 cases, while twenty-seven showed a poor response or relapse." In Sorsby's whole series of 333 cases treated with sulfonamides and 143 cases treated intensively with penicillin, the percentage of failures—assessed by poor response or relapse—was considerable in both series—16.3 per cent with sulfanomides and 23.1 per cent with penicillin. It was pointed out, however, that satisfactory responses could be understood in a relative sense only. In not a single instance was the response so poor as to cause anxiety for the state of the eye, and some of the cases classified as relapses were almost certainly cases of reinfection rather than relapses.

In higher concentrations, the use of penicillin once a day for four days has been found to be effective. At Johns Hopkins Hospital, the following procedure was used in the obstetrical work as a substitute for the Crede method. Upon admission to the delivery floor the mother received 200,000 units of penicillin intramuscularly, this

being repeated in the event that labor lasted longer than eighteen hours. The newborn baby received 50,000 units intramuscularly within fifteen minutes after birth. This procedure was carried out in 2,512 cases. The period of accurate hospital observation was less than ten days, and the follow-up home observation was unsatisfactory because of the nursing shortage. However, under this regime, there were no observed cases of gonococci conjunctivitis and no reports of such cases in this series from other physicians or hospitals for infectious diseases.

A similar program was carried out in the Sinai Hospital in Baltimore where from April 1, 1947, to May 1, 1948, 2,450 babies received similar penicillin prophylaxis, silver nitrate being omitted. The period of hospital observation was not less than six days. Again, no cases of gonococci conjunctivitis were observed. This record, however, is no better than reports of hospitals using the Crede method only, whereas with the use of silver nitrate, one application is considered sufficient. The instillation of penicillin drops or the injection of penicillin intramuscularly must be repeated for several days to set up adequate prophylaxis. This greatly increases the nursing load in institutions where it is employed and sets up difficulties of administration in general practice outside of hospitals.

Investigations in the use of sulfonamides and of antibiotics continue. As new compounds of sulfanilamide became available, one after another was used, only to be substituted by another compound. Another drug more effective than 30 per cent solution of sulfacetimide may yet be found. At the present time, it seems quite clear that penicillin when used in high concentration is the best agent for the treatment of gonorrheal ophthalmia. Doses of 50,000 units intramuscularly are now superceded by doses of 200,000 units intramuscularly. The single instillation of one drop of 2,500 units to the cubic centimeter solution of penicillin is known to be inadequate in the treatment of any virulent conjunctival infection. At the present time, 100,000 units of crystalline penicillin G to the gram in ophthalmic ointment opens up new fields for investigation. The end is not in sight.

In the past fifteen years, the development in improved sulfa drugs as bacteriostatic agents has brought about a remarkable improvement in the *result* of ophthalmia neonatorum, and the use of antibiotics has still further shortened the necessary time for treatment and greatly improved the chances of recovery without damage to the eyesight. At any time during the past fifteen years, the substitution of a sulfonamide drug or one of the antibiotics for the Crede method of prophylaxis against ophthalmia neonatorum might justly have been brought forward. There is no disagreement regarding the use of drugs for treatment of ophthalmia neonatorum that is once established, particularly if this be caused by one of the common bacterial agents such as the staphylococcus, streptococcus, and gonococcus. Silver nitrate was used in the treatment of ophthalmia neonatorum before the discovery of sulfonamides with rather indifferent results. The Crede method of prophylaxis was set up as a preventive measure and is not recommended as a method of treatment of an established ophthalmia. The commonly accepted etiology of ophthalmia neonatorum is that the eyes of babes are infected by organisms that make their way in between the lids during the process of birth. If these organisms can be removed by cleansing or can be killed by silver nitrate, the development of ophthalmia neonatorum from bacterial source can be prevented. The sulfonamides and antibiotics are bacteriostatic rather than bactericidal. Therefore, to be effective, the tissues of the eyes must be constantly bathed by a drug of sufficient concentration to prevent the development of the bacteria. Compare a single treatment of silver nitrate solution with the necessity of making multiple injections or instillations of penicillin to achieve the same degree of security against ophthalmia, and it is clearly seen that the Crede method should not be abandoned in favor of any other method of prophylaxis.

In the treatment of ophthalmia neonatorum, particularly of gonococcal origin, the use of penicillin instilled into the eye in the form of solution or by use of ointment containing a high concentration (100,000 to 200,000 units per gm.) of crystalline penicillin G, together with the intramuscular injection of crystalline penicillin G once daily, is the method of choice. Chemical conjunctivitis may be seen in the eyes of nearly all babes in which silver nitrate prophylaxis is used. It develops within a few hours after delivery and seldom lasts more than two days. In the majority of cases of blennorrhea following the

use of silver nitrate, cultures of the secretion from the conjunctiva show no organisms or harmless saprophytes. Inclusion bodies may be found in the secretion and in the scrapings of the conjunctiva in many cases which are sterile for bacteria. It is generally conceded that neither silver nitrate solution, sulfonamides or antibiotics are effective in arresting cases of inclusion body conjunctivitis. While the course is rather long, from three to twelve weeks, and the blennorrhea is annoying, very seldom do ulcers appear on the cornea or other disastrous sequelae occur.

In conclusion, a study of the reports that have appeared in the literature on prophylaxis and treatment of ophthalmia neonatorum since the introduction of sulfonamides and antibiotics impresses one with the efficiency of the Crede method of prophylaxis, its simplicity and the universality of its application. The scope of its effectiveness against various types of infection points out very clearly that as yet no thoroughly suitable substitute has been found. However, in the treatment of ophthalmia neonatorum, whether of gonorrheal or other bacterial cause, silver nitrate is not the drug of choice. In such cases, there is no doubt of the efficacy of sulfa compounds and of penicillin. The legal requirements of prophylaxis against ophthalmia neonatorum established by law or by regulations promulgated by state departments of health are applicable in every state in the union. Ophthalmia neonatorum is reportable to the local and state health authorities in most states, but a deplorable laxness in the enforcement of the regulations is evident in some states. No suitable substitute for silver nitrate 1 per cent solution as a prophylactic agent has been found in the long list of new bacteriostatic drugs. It is not now conceivable that established health measures should be abandoned until better measures have been indisputably proved. Physicians now have ample leeway to experiment with new methods of prophylaxis without violating the law and without avoiding proper control methods of disease prevention. Those not in a position to experiment with new methods without endangering the eyes of babies should be willing to go along with tested and proved methods. Let's preserve the laws and regulations as they are.

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SPECIFICITY OF THE VITAMINS

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teeth, ill-fitting dentures and other local causes of stomatitis.

Papillary atrophy is loss of substance of papillae of tongue so that an abnormally smooth appearance is presented.

Glossitis is a reddening of the surface of the tongue with or without swelling.

Dry skin or crackled skin is a peculiar mosaic appearance of the skin most frequently found in the lower extremities.

Purpura as perifollicular petechiae.

Folliculosis is a raised papular lesion best described by the term "permanent goose-flesh."

Follicular hyperkeratosis is a raised cornified lesion with keratinized plugs standing out from the hair follicles. The hair is frequently broken.

Edema is pitting edema, in the absence of other clinical causes for this condition.

Neuritis is evident in hyperactive or hypoactive achilles reflex with calf tenderness and cutaneous hyperasthesia, hypoasthesia or anesthesia.

It is with these signs in mind that the assessment of nutritional failure may be made. How many of the above signs must be present to make the diagnosis is not known to me. When I suspect scurvy, I expect to find signs in gums together with purpuric hair follicles; when I suspect pellagra I look for tongue and skin changes; when I suspect beriberi I require some one or several signs of neuritis in the legs; when I find unexplained edema I suspect any other deficiency may be present. It is with these devices and a good bit of guessing that the diagnosis of nutritional failure or malnutrition can be made and vitamin therapy be prescribed. The method of administering vitamins is too banal to need discussion here.

Correction of the diet is necessary for complete and lasting cure.

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The Private Practitioner and Industrial Medicine

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PHYSICIANS IN PRIVATE practice, whether in general practice or in a specialized field, share responsibility with industrial medical departments in helping industry carry out effective health maintenance programs.

I would like to discuss here some of the responsibilities where the functions of the plant physician *complement* rather than *supplant* those of the private practitioner. This discussion divides itself readily into two parts: first, the occasions where the industrial physician initiates the referral of an employe to the private practitioner, and, second, when the physician in private practice initiates the referral of his patient to the industrial physician.

Industrial Physician Initiates Referral

In futhering health maintenance programs in industry, the industrial physician is called upon to examine employes at different times and for varied reasons. During the pre-employment examination, the results of these examinations in relation to ability to be placed at work might be classified under the following headings:

1. *Non-disqualifying Ailments*
   (a) Infected tonsils
   (b) Deviated septum
   (c) Moderately high blood pressure
   (d) Mild diabetes
2. *Temporary Disqualification*
   (a) Hernia
   (b) Varicose veins
   (c) Poor vision
3. *Special Placement Problems*
   (a) Arrested tuberculosis
   (b) Epilepsy
   (c) Heart disease
4. *Disqualifying Conditions*
   (a) Serious heart disease
   (b) Malignant hypertension

It can readily be appreciated that in many of these conditions the classification in which the employe is placed depends upon the severity of the pathologic condition. In the first two classifications—those of the non-disqualifying and temporary disqualifying conditions—the problem is a simple one. The industrial physician refers the employe to his family physician for treatment.

In the instances where there are special placement problems or serious disqualifying conditions, the private practitioner and the industrial physician share a responsibility that can only be properly discharged when they are in *complete* agreement.

In cases of arrested tuberculosis, or serious heart disease, for example, the family physician should inform the industrial physician as to his opinion of his patient's physical condition. The industrial physician has the responsibility of placing the employe at work which is in keeping with the physical abilities of the employe and in an environment where there can be no aggravation of his disease state.

Differences of opinion are bound to arise in these instances. However, if the family physician is explicit in his information and the industrial physician explains in detail just what the employe is required to do, and describes the environment in which he works, these differences in opinion rapidly disappear.

Next, I would like to discuss the responsibility of the industrial physician in relation to *non-industrial illness or injury.* Any health maintenance program in industry worthy of the name must be built on the foundation of preventive medicine. The industrial physician must be aware of any exposure in the plant that might affect the health of an employe. He must see that these exposures, whether from dusts, vapors, chemicals, et cetera, are under control.

Similarly, the industrial physician should be interested in the employe who comes into his medical department with non-occupational illness or injury. The employe considers his condition to be a trivial one, but to the industrial physician this provides him with his greatest opportunity to further his health maintenance program through "preventive medicine." The industrial physician's role is that of a fact-finding or case-finding agency. It is not in his province to treat these employes. Many of the complaints considered trivial by the employe, too trivial for him in his opinion to consult his own physician, are too often found to be early symptoms of major diseases. Once the industrial physician recognizes this and has referred the employe to his own physician, he has furthered his

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own health maintenance program which has as a main objective the reduction of absenteeism. Numerically this type of referral accounts for the largest number initiated by the industrial physician.

Private Practitioner Initiates Referral to the Industrial Physician

There are four main types of referrals which are initiated by the private practitioner:

1. Reporting any condition suspected to be of an industrial origin.
2. Where changes in jobs are advisable.
3. Conditions justifying absenteeism.
4. Returning to work following such absenteeism.

The symptoms of occupational disease frequently resemble those of common illnesses; therefore, a diagnosis of occupational disease must be based on sound *factual* evidence. Consultation with the industrial physician in cases where doubt exists is a responsibility of the private practitioner.

Often the family physician feels that a change in job would be of benefit to his patient. In these instances he should send the patient to the industrial physician with a note giving the diagnosis which explains his reason for requesting such a change. Requests for transfers from one job to another should be limited to those instances where there can be no doubt in the mind of the private practitioner that such a transfer is essential to the health of the individual concerned. The role of the physician is often an unhappy one in instances where his patient is not really ill, but attempts to use minor or imaginary ailments to gain his objective. The industrial physician also is in an embarrassing situation for he *must* limit his recommendations for transfers from one job to another, if one is available, to those employes definitely in need of such a transfer.

Finally, mention should be made of the instances where the private practitioner refers his patient to the industrial physician for leave of absence necessitated by an illness and subsequently requests his return to work. When these referrals are conducted on the same plane that is the custom between fellow physicians, little difficulty arises. Professional courtesy demands, as in the request for job change, that a diagnosis justifying the request accompany such a request. Critical aloofness on the part of either the family physician or the industrial medical director does not further the discharge of their *mutual* responsibilities.

Mr. Leonard Mayo, in an address here in Detroit last week, stated that "the professions do not belong to the membership of that profession, but to those they serve."

I do not expect that you will wholly agree with that statement. However, the fact remains that many do agree with Mr. Mayo. Let us then, by a better understanding of our mutual responsibilities, render service on such a high professional plane that those we serve *jointly* not become bewildered and critical of us—leaving them receptive to ideologies which we *unitedly* oppose.

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ESSENTIALS IN PSYCHOTHERAPY

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technical question, how to prevent the development of such an emotional impasse. Correctly timed interruption of the treatment, reducing the frequency of interviews, encouraging certain kinds of experiences in the patient's daily life—all these are technical devices which have been successfully applied in recent years to combat an undue prolongation of the treatment.

As a result of these developments, psychoanalytic treatment is gradually becoming a more flexible, less routinized procedure. Depending upon the nature of the patient's personality and illness, the therapy must be adjusted to fit each individual case. Fundamental psychodynamic knowledge is utilized therapeutically in various ways in different types of cases. Even with the same patient in the different phases of the treatment, the nature of the therapeutic approach must be adapted to the changes in the patient's personality achieved during the course of the treatment. Thus, an introductory supportive therapy may eventually be followed by uncovering techniques. The pedantic distinction between psychoanalysis and other forms of psychotherapy is giving place to a new flexible orientation, according to which the various forms of psychotherapy as well as the classical psychoanalytic procedure are considered as different applications of the universally valid principles of psychodynamics.

All that is needed for oral examination is proper illumination, a finger cot or rubber gloves, a tongue depressor, and *knowledge of what to look for.*

Avicenna -- Philosopher and Genius, Teacher and Surgeon

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"Abu Ali Husayn Ibn Abdullah Ibn Sina"
(Avicenna) 980-1037 A.D.

DAILY WE READ of the tremendous progress being made in various fields of medicine and surgery, forgetting often that the discoveries of today are frequently based on the intelligent observations and careful research of ancient men who practiced medicine under most difficult and discouraging conditions. They were truly men of vision, pioneer heroes, who rarely are properly recognized or honored.

Such a genius was the man popularly known as Avicenna, an original thinker, a brilliant leader, an indefatigable teacher. Nearly a thousand years ago, while America was still an unexplored nation inhabited by savages, decades before the Norman conquest of England, while Firdausi, one of Iran's great poets, was commencing on his life work, the glorious "Epic of Kings," there was born of humble parents in the little village of Afshena near Bukhara (then a Persian province) a boy who was destined to become the greatest thinker and scientific writer that Persia has ever produced. His father, who was a Persian from Balkh, had an enviable government job, that of tax-collector for the amir of Bukhara.

Of a religious family, his father being an adherent of the Isma'ili sect, a mystical seeker after truth, this precocious boy had a good education according to the standards of that day, being taught by capable tutors. In his autobiography he modestly admits that at the age of ten he had memorized the entire Koran, and was acquainted with all the Arabic classics! He then turned to the study of grammar and dialectics, philosophy and logic, geometry and astronomy, natural science and Moslem jurisprudence, and if we are to believe his own statements he had developed into a learned scholar and research worker by the time he had reached the age of sixteen. He was never an introvert!

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AVICENNA

Knowledge he acquired wherever he could find it, learning arithmetic from a grocer, and higher mathematics from a traveling scholar. Persistence and patience were among his virtues, for he testifies that he read Aristotle forty times, admitting that he could not understand him even after this much repetition. He then turned to the study of medicine and within two years had attained such a reputation as a physician, that when the local Samani ruler, Nuh ibn Mansur, became ill, he was called in to treat him. Having cured his royal patient, he was given, as a reward, the privilege of using the Imperial Library which contained many rare and unique books, and he was thus able to continue his studies in philosophy and science.

This library was later destroyed by fire, and some of Avicenna's jealous detractors did not hesitate to say that he had purposely burned it to enjoy a monopoly of the learning he had acquired from his research from the manuscripts found therein! He early started his career as a writer, and before he reached the age of twenty-one he had written a Commentary on the Law, and a Synopsis of All Sciences, showing even at that age his wide interests and real ability.

His father died when he reached the age of twenty-one, and Avicenna then had to assume the responsibility of supporting himself. In the fashion of the day he first sought service at the court of Ali ibn Ma'mun, the ruler of Khiva, a place where many men of fame were gathered, and where young Avicenna had an opportunity to learn, as well as to display his knowledge.

Sultan Mahmud of Ghazna, the then patron of Firdausi, was filled with envy when he heard of the reputation for brilliance and learning of the court of Ali, and demanded that certain of the most outstanding of the Khiva scholars come to his own court at Balkh. Mahmud's reputation for kind treatment of courtiers was not of the best, and not all who were invited were willing to come; but Shah Ali, realizing that he was not strong enough to protect his circle, advised them either to obey Mahmud's mandate or flee.

Avicenna and one of his colleagues chose to flee, and with much trouble and suffering finally reached Nishapur, where he thought he had found a safe haven. But Mahmud, who was angered that his so-called "invitation" had been refused, caused Avicenna's portrait to be painted and copies distributed throughout Persia, that he might be apprehended and delivered to the court at Balkh. So the young doctor fled again, this time to Jurjan on the Caspian sea, attracted by the fame of its ruler Qabus, as a patron of learning. Unfortunately that gentleman was murdered just as Avicenna arrived, so the young physician remained in seclusion, under an assumed name, and practiced medicine to make a living.

It was while here that he made his celebrated "Diagnosis of Love," a story which has found its way down the centuries in various forms. One is that Avicenna was called to treat a young man of the royal family who had been ill for some months of an unknown disease which baffled all the doctors of the community. Avicenna, whose identity was then unknown, kept his finger on the patient's pulse while he had someone repeat all the names of the various districts and towns in the province. As a certain town was mentioned he felt a distinct flutter of the patient's pulse. Then he had someone acquainted in that town name all the quarters, streets and houses of the town; again a flutter was felt at the mention of a certain house. He then had the names of the inhabitants of that household enumerated, and at a certain name, another distinct flutter appeared. Gravely he announced, "This young man is in love with such and such a girl who lives in such and such a house in such and such a town. If he will marry the girl he will become entirely well." And he did and was, and Avicenna's fame was made! They discovered then that he resembled the portrait of that Avicenna, who had been ordered to the court of Sultan Mahmud, but nevertheless they treated him with honor and respect and did not send him back to Balkh. During his years at Jurjan he wrote several works on astronomy and logic.

It is not known just why Avicenna left Jurjan, but he and his biographer, Ibn Ali Usaybia, travelled to Ray and entered the service of Prince Majid-ul-Douleh, where he did not stay very long, but travelled 200 miles southwest to Hamadan (the ancient city of Ecbetana), where he chose Prince Shams-ul-Douleh as his patron. The prince soon after developed severe colic which Avicenna was able to cure, and as a reward he was made the prime minister. This caused much jealousy among the military, there were some riots and revolts, and Avicenna was forced to flee for his life. A month later the prince had another attack of colic (possibly appendicitis?) and sent for Avicenna, apologized for his banishment, and asked Avicenna to treat him again. The prince was cured and Avicenna reinstated to his former position of authority. His years in Hamadan were busy ones, practicing medicine during the day, lecturing on medicine or philosophy evenings, or dictating notes for books.

Avicenna not only had an unusually keen mind but an iron constitution and great physical strength. Pleasure-loving and light-hearted, he found relaxation in drink and riotous living, and in political plotting. His treasonable correspondence with Ala-ul-Din the ruler of Isfahan was discovered and Avicenna was thrown into prison. With help from the same friend who had aided him in Jurjan, disguised as a Sufite priest, he escaped, and fled to Isfahan, where with Ala-ul-Din as his patron he reached the height of his fame and glory.

He treated the sick, wrote many books on many subjects, and each Friday held open house for all scholars who wished to come and discuss with him the various sciences in which he was an authority. Here is a description of one of his days given in the Chahar Moqala:

"He used to rise up every morning before dawn and write a couple of pages of Al-Shifa (The Healing). Then when the true dawn appeared he used to give audience to his disciples and to me. We used to continue our

studies till the morning grew bright, and perform our prayers behind him. As soon as we came forth, we were met at the gatc of his house by a thousand mounted men comprising the dignitaries and notables as well as such as had boons to crave or were in difficulties. By the time he arrived the company had reached two thousand. There he would remain until the noon-day prayer, and when he retired for refreshment, a great company ate with him. Then he took his mid-day siesta and when he rose up from this he would perform his prayer, wait upon the king and remain talking and conversing with him until the afternoon prayer."

Finally worn out by hard work and hard living, he died at the early age of fifty-eight while on a journey back to Hamadan, and was buried there, and there his tomb can be seen today.

In his last illness he treated himself unsuccessfully, and thus some of his detractors said that neither could his physic save his body nor his metaphysics his soul. In his philosophy, a form of Aristotelianism, he held that (1) all created things are possible in themselves, but become necessary only by the act of the Creator, (2) the soul of man has two faces, one turned toward the body which forms the practical understanding, the other receptive to external forms which it reproduces in due order.

One of the remarkable features of Avicenna's life is the immediate recognition that his fellow countrymen gave him, and the respect and honor that his name has throughout the world even to this day. Within a few years of his death he was known by such titles as "Chief of Chiefs" and "The Second Teacher" (Mohammed being the first?).

His writings were numerous and voluminous, nearly one hundred volumes in all, and many of these gradually filtered through to Europe, where they were received with great veneration and esteem and translated into the Latin and later into other languages. His enthusiastic reception in Europe was probably due to his skill as a philosopher and theorist rather than as a practicing physician. His elaborate train of reasoning appealed to the Middle Ages, and his writings, even as a Mussulman, were considered quite Orthodox in Catholic Europe.

Most of his books were written in Arabic although a few were in his native Persian, and his range of thought was extraordinary. Most of his books (sixty-eight) were on theology and metaphysics, eleven were on astronomy and natural philosophy, sixteen on medicine and four in verse. His verse included a number of quatrains, some of which Professor Jackson and other scholars think were "borrowed" and used by Omar Khayam a century later. His most celebrated Arabic poem is that describing the descent of the soul into the body from the Higher Sphere, which is its home, a poem of real beauty. (See Browne's Literary History of Persia, vol. 2, pp. 110-111.)

Half of Avicenna's medical works are versified treatises on comparatively unimportant subjects, and according to Dr. Browne they have little value either as verse or as science! The most important, the most famous, the largest and the most accessible in various translations of all of Avicenna's medical works is his "Canon of Medicine" (Al Qanun fi't-Tibb), a work which contains nearly 1,000,000 words, and which consists of five books. The first book naturally is rather theoretical and consists of the general principles involved in the diagnosis of disease and its treatment. Each book consists of a number of related essays (fen) which are carefully subdivided into chapters and detailed paragraphs, indicating a very fine logical mind. The first essay in Book One is based on various Greek writings defining the fundamental doctrines of medicine and methods. In the second essay, the diagnoses of general diseases are considered, and he goes into great detail about the examination of the pulse and of the urine, making some very interesting observations long since forgotten and now being "re-discovered" by today's scientists. Some of the material naturally has been discarded through the centuries as medicine has progressed, but it is surprising how much is still basically sound. The third essay is on hygiene, and its importance, and in what would today be classified as preventive medicine. In the fourth essay he goes into treatment in detail, telling of the use of the cautery and of bleeding, as well as enemas and purges.

Book Two is really a pharmaceutical dictionary arranged in alphabetical order, based on certain Greek texts but containing descriptions of many remedies which were not known to the Greeks.

In Book Three one finds long and detailed descriptions of many diseases, based on their symptoms and their pathology. He was an excellent observer as well as a skilled teacher, and was able to evaluate the symptoms he had noted. He describes venereal disease, but his chief emphasis is on diseases of the chest and of the gastrointestinal tract.

Book Four includes infectious diseases as well as surgical conditions, cosmetics and toxicology.

The last book, Book Five, is primarily for the compounder, telling how to prepare drugs and containing the most complete materia medica that (to that time) had ever been written.

This book (The Canon) first published in 1473 (Milan) became *the* textbook of all of the universities of Europe, displacing the works of Galen and Hippocrates and forming the link between them and modern medicine. It said all that could be said (at that time) on every medical subject, and said it as well as it could possibly be said, and it is no wonder that in addition to various editions in Latin, there were also translations into Greek and Hebrew, and later into modern European tongues.

Avicenna was quite a psychologist and an expert in mental disease, and the following story is told of his treatment of a patient suffering from melancholia, which term Greek students will recognize as meaning "black bile." It seems a certain prince of the House of Buwayh was suffering from the delusion that he was a cow. Daily he would low like a cow, causing annoyance and embarrassment to all of his friends. He would go about crying, "Kill me that a good stew may be prepared from my flesh," until it finally became so serious that he refused to eat, and no physicians were able to help him. Finally Avicenna was called in but he hesitated to come as he was so involved in politics and private business, as well as his literary work. Finally he consented, but first sent a message to his prospective patient that he should be of good cheer, for his requests were to be answered and a butcher would soon be coming to his house to slaughter him and make a good stew of his meat. . . . A little later, Avicenna, holding a large knife in his hand, entered the sick-room, saying, "Where is this cow, that I may kill it?" The patient lowed like a cow to indicate where he was, and Avicenna ordered him to be laid on the ground and bound hand and foot. Then Avicenna felt him all over and said, "Unfortunately he is too lean to be killed now, he must be fattened first." Then they offered him nourishing food of which he now partook eagerly, and gradually he gained strength, got rid of his delusion and was completely cured! Suggestion often played an important part in old Persian medicine even as it does in medicine today.

Avicenna's belief was that all creation was composed of four elements—earth, fire, air and water, in various combinations. There were also four principals: the hot, the cold, the wet and the dry, and each of the elements partook of two of these principles. Corresponding to the four elements were the four humors generated from the food taken by the mouth. These were called blood, bile, phlegm, and black bile or spleen. If the proportion of these four in a person was perfectly balanced, then the temperament of that person was in perfect harmony, but this was a rare state! Usually there was an excess of one or more humors, or too little of some of them.

Avicenna also taught the treatment still used in Iran by some of the very old practitioners of curing hot diseases by cold remedies, and cold diseases by hot remedies, and for this purpose classified all diseases and all remedies. Thus, theoretically, the treatment of medicine as he practiced it was a perfect science, but actually it was in practice mere guesswork and empiricism, built upon the experience of generations of physicians but not founded on scientific fact or research.

Some writers (Garrison) think that the influence of the "Canon" on the West was bad as a whole, for it confirmed the idea that the use of syllogisms was better than the first-hand investigation of nature, and it marred the progress of surgery by suggesting that it was beneath the dignity of the physician to practice this "manual art," and it was not until many centuries later that surgery was taken from the hands of the barbers and midwives and given its rightful place. In spite of all this, it gave to Europe a standard by which medical practice and scientific theory could be tested, and even Chaucer in his "Pardoners Tale" refers to the writings of Avicenna as those of a man whose works the entire intellectual world knew.

The encyclopedic character of the "Canon," its systematic arrangement, its philosophic plan, its completeness, all tended to raise it to such a height that even today in Persia (Iran) it is considered by the thousands of doctors still practicing "Yunani" (Greek) medicine as the last word of all matters connected with the healing art.

Although it is true that Avicenna's great work is based on the works of his predecessors, Galen, Hippocrates, Al-Razi (Rhazes) and Al-Majusi, and contains much of their thought and many of their conclusions, yet original observations lie scattered throughout his works. Centuries before the discovery of the microscope he suggested that certain diseases were waterborne, the cause being minute animals too small to be viewed by the human eye;

he observed that a disease like malaria could cure epilepsy and other nervous diseases, and that same treatment is being used now for paresis. He was far in advance of his age in his condemnation of astrology and in his attempt to divorce that science from medicine. His discourses on dietetics and hydrotherapy are in line with the most recent research, and his observations on the effect of climate on health would do credit to a modern scientist. Many of the drugs which he recommended are to be found in today's pharmacopeia.

Avicenna has been dead more than 900 years, but his reputation and his works will live on forever. When one can see the great influence one such Persian lad had upon the entire world, it makes one wonder if God in his divine wisdom and power will not raise up another such lad in this age, to influence his own and surrounding nations. Possibly some young man (or woman) entering today upon the study of medicine may become the Avicenna of the twentieth century. There are still many fields to be explored, many opportunities for constructive leadership and provocative thinking, that will produce improved methods of diagnosis and better lines of treatment, as well as prevention and eventually eradication of certain types of disease.

JMSMS

Ubiquitous Hosts for 1950 Michigan Postgraduate Clinical Institute and Heart Day:

Guest Speakers and Hosts: George Crile, Jr., M.D., *Gaylord S. Bates, M.D.;* J. Mason Hundley, Jr., M.D., *Ward F. Seeley, M.D.;* Leo G. Rigler, M.D., *Howard P. Doub, M.D.;* Francis E. Senear, M.D., *Harther L. Keim, M.D.;* Walter C. Alvarez, M.D., *Louis J. Bailey, M.D.;* Marion A. Blankenhorn, M.D., *Charles E. Lemmon, M.D.;* Franz G. Alexander, M.D., *Leo H. Bartemeier, M.D.;* Wm. L. Benedict, M.D., *A. D. Ruedemann, M.D.;* Richard H. Freyberg, M.D., *S. G. Meyers, M.D.;* Julian P. Price, M.D., *Glen E. Hause, M.D.;* Isadore Snapper, M.D., *Louis Jaffe, M.D.;* Waltman Walters, M.D., *Joseph A. Witter, M.D.;* F. Bayard Carter, M.D., *R. K. Whiteley, M.D.;* Louis N. Katz, M.D., *John Murphy, M.D.;* Hugh McCulloch, M.D., *Norman E. Clarke, M.D.;* Irving S. Page, M.D., *Warren B. Cooksey, M.D.*

Hosts' names are in italics.

Society seems to have lost all remembrance of the irresponsibility of a writer on human and divine nature. They forget that he is only a reporter, and not at all accountable for the fact he reports. If, in the best use of my eyes, I see not something which people say is there, and see somewhat which they do not say is there, instantly they call me to account as if I had unmade or made the things spoken of. . . . This diffidence of society in authors seems to show that it has very little experience of any true observers—of any who did not mix up their personality with their record. The Arabs of the desert would not forgive Belzoni with his spyglass for bringing their camp near to him.—EMERSON.

SOME CLINICAL USES OF ENDOCRINE PRODUCTS IN GYNECOLOGY

(Continued from Page 545)

Ankle Edema

Edema can be due to many medical conditions, some of which are serious and need their respective treatment, but do not overlook the fact that edema may be due to hypothyroidism and in such patients will disappear on adequate doses of thyroid.

Conclusions

An attempt has been made to classify patients as to their menstrual history on a purely clinical basis. This cannot be accomplished in all patients but it has been found helpful in large numbers.

The use of the words usually and sometime has a significance. These people may not have all the symptoms or signs mentioned in the four groupings but they still belong to that particular group. Just as at the menopause, a patient may not have the five cardinal symptoms but she may have one, two or three of those symptoms by which you know she has reached the climacteric.

The complaints of each group have been stated and treatment covered.

I hope this will prove of value to physicians in localities where laboratory tests are difficult to obtain and to the physician who wants to give adequate treatment to a patient without sufficient funds to pay for such tests.

JMSMS

POEM

By Laureta Dwyer

When I awake and quake with a belly ache
I wanna DOCTOR!

I don't want some clerk or other jerk who in an office may lurk
To decide where on my hide aid should be applied
I wanna DOCTOR! !

Not for some politician with less brains than ambition
To suggest I'd best get rest or maybe blood test
I wanna DOCTOR! ! !

Why should I wait while they prate, then dictate my fate?
I wanna DOCTOR! ! ! !

What good to me would it be should folks see
Some slight mistake about my ache brought on my wake
Recovery on paper with me cuts no caper.
When illness I'd quell, so I can get well
Then dammit to hell! ! ! ! !
I wanna DOCTOR! ! ! ! ! !

History of Circumcision

By Eugene A. Hand, M.D.
Saginaw, Michigan

THE ORIGIN of circumcision is most ancient. The finding of circumcised men in the drawings of the Cave Dwellers[16] dates this custom back at least to the Magdalenian period of the Paleolithic or Stone Age. This is also confirmed by the emphasis on the stone or flint knife in the circumcisional rites of the Jews, the Egyptians,[23] some Arab tribes, and such aboriginal people as the Australian aborigenes.

There are some who believe the Jews learned circumcision from the Egyptians during their Egyptian captivity,[16] but this is unlikely, as Abraham's covenant with Jehovah[11] occurred prior to this. The belief held by some that the Egyptians learned this from the Jews[1] during this captivity is refuted by the finding of picturization of this operation on bas relief plaques in Egypt dating back to 2400 B.C.[21] and also the finding of circumcised mummies dating back to at least 1614 B.C.[16]

The Egyptians and the Ethiopians at first limited circumcision to the priesthood,[1] whose members also shaved the entire body to denote purity. Circumcision spread from them to the aristocrats and nobility and then to the lower classes, until to be uncircumcised was to be considered unclean.

Circumcision with the Arabs probably started as a fertility or puberty rite. The Arabic word "Hatana" means both to circumcise and to marry, indicating the close analogy in their minds between this operation and reproduction. Female circumcision was done by the early Arabs but was soon discontinued. Circumcision was so common among the Arabs during Ishmael, the Prophet's time, that it was not mentioned in the Koran.[16] It was not until later that the Arabs, who had considered this a physiologic act, gave it a religious significance. As Ishmael was circumcised at the age of thirteen, this age was arbitrarily chosen for religious circumcision. Many tribes still choose seven, fourteen, twenty-one, and twenty-eight days; while the Persian Arabs circumcise at three or four years of age. Jacob[16] described a very sadistic brutal form of circumcision performed by certain Arabic tribes of Yemen in which the rite was done to determine the youth's fitness for marriage.

Circumcision is first mentioned in the Bible in the covenant between Jehovah and Abraham.[11] The Lord promised to make Abraham the father of nations, to make him fruitful at the age of ninety-nine, to give to him and his seed the land of Canaan, to be their God, and to give Sarae, his ninety-year-old wife, a son, making her mother of nations. For this Abraham circumcised himself, his sons, and all the men of his household, slave or free. The date for this is given by authorities as from 1500 B.C. to 850 B.C.[22]

Circumcision was not universally practiced by the Jews while they were captives in Egypt. Moses born during their period was uncircumcised. Jehovah was about to smite him down because he did not have this tribal mark,[8] but he was saved when his wife, Zipporah or Cipora, quickly circumcised their son and threw the bloody foreskin at his feet, thus representing symbolic circumcision. The fact that circumcision was a tribal mark with the early Jews is also indicated when Jehovah forbade the eating of the Passover Feast by circumcised Jew or Gentile.[9]

Joshua again took up the covenant at Gilgal[12] when he circumcised, at the "hill of the foreskin," all the males that had been born in Egypt or in the wilderness. Circumcision was then practiced by the Jews with little change except during the reign of Antiochus IV who tried to prevent them from observing this custom. The eighth day of life was set as the proper time for circumcision when they reached Palestine. This was considered a tribal mark up to the time of the Babylonian exile. During and after this exile circumcision assumed religious importance.

Female circumcision has not been practiced by the Jews.[15]

The importance of the rite being performed on the eighth day of life is brought out by the fact that the rite is performed on this day even if it be the Jewish Sunday or even Atonement Day.[2] It is never performed prior to this day except in case of stillbirth or death prior to the eighth day, in which case a circumcision is performed to symbolize the fact that the child has been introduced into the Abrahamitic group.[2]

Early Mosaic law employed a reasonably good surgical technique, using a flint knife. The rite is performed by a Mohel who may be, but usually is not, a rabbi. The early Mohels recognized blood dyscrasias in families and banned circumcision in

sons of mothers whose first son had bled profusely at circumcision. The child is always examined carefully by the Mohel to determine his ability to stand the operation. If there is evidence that the child could not stand the rite, the act may be postponed, and in the case of prematures the delay may be for a considerable time.[2]

The Jewish ritual circumcision, Brith Milah, is divided into three stages. The first is called Milah, which included the actual excision of the foreskin which usually is done with one stroke of a stone or flint knife. The second is called Periah which is the tearing of the inner lining away from the excised foreskin. The third is known as Mezizah which is the sucking of the bloody wound of the mutilated organ by the Mohel whose lips are wetted with wine. The dangers of this last stage have long been known, and it has been given up by all but the most orthodox. The use of wine during the rite may well be a symbol of this step, now almost extinct. The Mohel of recent years have spilled wine on the mutilated organ to prevent infection.

Sauer[19] reported fatal bronchopneumonia in a child following ritual circumcision by a Mohel in a hospital. Reuben[18] reported forty-one cases of tuberculosis, some with lesion of the penis suggestive of the tubercular chancre of the primary tuberculosis complex, where the Mohel concerned was later proven to have positive sputum. Webster[20] reported a case of tuberculosis traced to circumcision in a Gentile following non-ritualistic circumcision.

Kiser[17] stated that circumcision has not been required of proselytes of the Jewish faith since 1892, and that since then it has been chiefly a hygienic measure. Despite this, the term "arelim" or "uncircumcised" is still a word of reproach to a Jew, carrying the implication of being unclean. In modern times the operation is often performed by a physician, but a rabbi is always present to conduct the ritual.

The Phoenicians spread the custom of circumcision which they learned from the Egyptians in their travels through the known world of their time. The Greeks and others who came to Alexandria, Egypt, to study also carried this custom home with them. Circumcision was considered a hygienic measure by these people.

The question whether ritual circumcision automatically led to salvation or whether it was more important to follow the laws of Moses in spirit is mentioned in the Old Testament in the references to circumcision of the heart.[17]

Circumcision as a hygienic measure was known to the people of the Mediterranean world when St. Paul and the other disciples began to spread the teachings of Jesus to these people. The dissension over whether these people should follow the laws of Moses in ritual, as marked by circumcision, or in spirit by good living, led to the parting of Paul and Barnabas. St. Paul[3] was not against circumcision, as he caused to be circumcised Timothy, whose father was non-Jewish.[4]

In his epistles to the Romans,[14] to the Corinthians,[6] the Galatians,[10] the Phillipians,[13] and the Colossians,[5] St. Paul taught them that spiritual circumcision or circumcision of the heart was the way to salvation, and not ritual circumcision; that following the word of God and Jesus was the important thing; that circumcision as given to Abraham was the seal of faith, and that Abraham was the father of the faithful, not the circumcised; and that God's blessing would fall on the circumcised or uncircumcised alike if they would be pure of heart. From these teachings early Christians did not adopt circumcision as a religious rite, although some of the higher classes still continued it as a hygienic measure. Some actually avoided circumcision, wishing to be set apart from the Jewish race, as anti-Semitism was even then prevalent.

Circumcision was well known to the Aztecs.[23] From the Aztecs this custom spread to the Incas and also to the various Indian tribes of South and North America. With these people it was a fertility or puberty rite, but may well have also been a form of symbolic sacrifice in place of human sacrifice which they practiced.

Circumcision as practiced by those who came under Semitic influence consisted of excision of the foreskin only. With the primitive tribes of Asia, Africa, North and South America, Australia, and Oceania, circumcision includes any of the various mutilating operations of the male and female genitalia. These include such brutal forms as subincision or whistlecocking, as still practiced by the Australian aborigenes, and others not in the scope of this article. Circumcision with these people could not have started as a hygienic measure. The origin must have been as a fertility rite, a puberty rite, a copy of the female defloration rite, or a form of phallic or Istar worship.[16]

In certain African tribes[15] a man was considered

(Continued on Page 578)

The Family Physician

The tradition of the Family Physician is deeply etched into the American scene, and it is fitting that the Michigan State Medical Society should give annual professional recognition to Michigan's Foremost Family Physician. As an unblemished synthesis of skilled healer, family counselor, public health instructor, practical psychiatrist, and handy source for job reference, birth affidavit or selfless miscellaneous services, the idealized version of Family Physician has probably never existed. The surprising fact is that so many have so nearly approximated this picture during lifetimes devoted to ameliorating the various physical ailments that normally beset the American family.

Medical progress and social change have radically altered the qualifications of the Family Physician. Some practical psychology, a beard, a bottle of calomel, and a little medical knowledge are no longer sufficient professional equipment, and today's general practitioner is a skilled and well educated scientist, permitted and expected to practice modern medicine and surgery to the limits of his ability and experience. But the need for sympathetic medical contact with the family unit is greater than ever before, even though more difficult of accomplishment. And there are few, if any, areas of medical practice today which offer more opportunity for human service or greater spiritual rewards for the doctor himself.

In the increasing breadth and complexity of modern medicine, adequate medical service without the specializing medical groups is inconceivable. This need for specialization has been paralleled by an increasing emphasis on the importance of the general practitioner who bridges the gap between the specialties and the family—the Family Physician. But it is questionable whether the value of experience in family practice as preliminary to specialization has been fully appreciated. Certainly, the overlapping and interdependence of these two aspects of practice are responsible in great measure for the high general level of medical treatment today. And even more certainly, American doctors must continue to reach into the family unit with medical, human and economic understanding if the physician is to retain his present status in American society.

W. E. Barstow M.D.

President, Michigan State Medical Society

President's

Page

Editorial

THE LOBBY THAT TAXES BUILT

STRICT LAWS provide that anyone who tries to influence the action of Congress on measures before that body must register as a Lobbyist if he works for hire. Representatives of the American Medical Association and of many of the State Medical Societies have conformed and registered. Penalties for failure to register and report expenditures are severe.

John M. Vorys, Representative from Ohio, in an article in *Nation's Business*, says that agents of the Federal Government work unceasingly for Federal housing, federal power, federal invasion of education, socialized medicine, federal funds for rural telephones, and gigantic new valley authorities patterned after TVA, larger subsidies for public works, extension of wartime controls into postwar era. They want more federal aid for airports, roads, hospitals, forest trails and parks, and a separate national health institute for every major disease which afflicts humanity.

The agents of this Federal lobby on the government payroll swarm the cloakrooms of the House and Senate *without registering,* and they spend more than $100,000,000 a year, making no reports of expense accounts which by law all lobbyists must file.

A recent report of the Bureau of the Budget to the Hoover Commission reveals that our Federal Government employs 2,327 full-time workers in publicity and public relations. In another group, 1,212 give part of their time to publicity. The salaries alone of these 3,539 aggregate $13,043,453. Pamphlets and other printed material cost $45,000,000 a year. And the postage on these would be $42,000,000 a year.

During the past ten years the Federal Security bureaus have spent over $20,000,000 in a campaign for socialized medicine. Oscar Ewing's Federal Security Agency is spending $2,000,000 a year in publicity, and has spent $1,500,000 for the book "The Nation's Health."*

The final report of the Harness Committee in 1949 said "Whether the immediate purpose of government propaganda is good or bad, the fact remains that individual liberty and free institutions cannot long survive when the vast power of government may be marshalled against the people to perpetuate a given policy or a particular group of office holders."

That is the real challenge of government's $100,000,000 lobby for State Socialism. A numerically small group of willful men are attempting to perpetuate themselves in powerful positions.

If this $100,000,000 were removed from the direction of the bureaucrats and as much as $10,000,000 given to the Congress for scientific and research aid, billions would be saved.

SOCIALISM GAINING GROUND!

FOR ALMOST a generation, the Federal Government has been using every effort to secure more control of the health professions, on the pretext that our people could not afford to pay the costs of medical and health care. For the past decade, this ambition has been especially furthered by a small but powerful group of willful persons in the employ of some of the bureaus of the government where they control propaganda. They have enlisted the help and approval of some of our legislators and administrators, even to the very highest level, and have lately spent above seventy-five million a year of our dollars and untold workers' time in their nefarious business, and undermining attempts to misrepresent health care.

State Socialism consists in the State doing the worrying and thinking for the people, giving them "security" in exchange for the loss of their freedom. The Welfare State is urged upon us in glowing terms as something completely good and ultimately to be desired. We do not have to go to England to find out what the result will be. Our Government has already experimented with the Welfare State for seventeen years, and what is the present situation? The program was developed to give the agriculturalists assured income which they gladly accepted, not realizing that for each "benefit" of absolute necessity there would be a corresponding loss of some right or privilege.

A scheme of agricultural support was devised for the benefit of farmers who were suffering dur-

*One thing that has made this possible is we have no overall bookkeeping system. A complete financial statement cannot be given at one time. Reports by the carload cannot be correlated.

ing the years of depression. Having a voice in the halls of Congress, plans for support of farm prices and production were made. We all remember our horror at the murder of the baby pigs and the plowing under of the crops. That was a few years ago and was nothing to the present condition of agriculture.

The Agricultural Department now has extended its support program to include potatoes, corn, soybeans, grain sorghums, dry beans, cotton, oats and peanuts. In raising these commodities the farmer is allowed to plant just so many acreas, and no more. If he exceeds his allotment he cannot receive support prices or benefits, or sell to the government. The farmer can plant his hills closer together, and thus raise much more. He also uses freely of fertilizer and any other method of securing a greater yield. The Agricultural Department of our State, and doubtless of others, is constantly experimenting at considerable expense to improve the yield. The result?—

The Government's Commodity Credit Corporation now holds as surplus nearly five million bales of cotton, a seven months' supply for the nation's cotton mills, and costing 750 million dollars; 400 million bushels of wheat (900 million dollars) enough to supply a loaf of bread to every person in the United States each week for a year; 600 million bushels of corn (another 900 million dollars) enough to feed all the livestock and poultry of the United States for three months; the C.C.C. also has 70 million pounds of dried eggs, 100 million pounds of butter, and 250 million pounds of dried milk, not to mention huge stocks of tobacco, dried fruit, turpentine, rosin, wool, soybeans, turkey, peanuts.

The scandal of what has happened to potatoes to uphold the price is too recent. The *American Mercury,* quoted by *Reader's Digest,* reports that 31 farmers in Aroostook County, Maine, received checks of $100,000 to $450,000 for potatoes; 450 farmers got from $50,000 to $100,000. The government bought potatoes in Maine for $2.90 per sack, shipped them to Chicago at a cost of $1.10 and sold them for one cent. One farmer paid $18.00 for 1,800 sacks, fed them to pigs and sold the bags for $180.00.

Such a story of efficiency in government surely makes us hesitate to submit the administration of the health field to like management. Independent practice has given us the finest health position of any nation. Why exchange a certain security for the questionable Utopian "SECURITY" of the WELFARE STATE?

"A Department of Government with thousands of employes is daily going about the business of causing all the people of the country to pay higher prices for food."—(Mark Sullivan, *New York Herald*).

A FEW FACTS TO REMEMBER

WHILE CONTEMPLATING the entrance of government in the health affairs of the nation, we might well consider whether the government control proposed is apt to be beneficial.

We have just shown the tremendous surpluses in cotton, peanuts, etc. One would think the government might take thought to avoid the same condition in the future. Not so—The Congress, with the approval of the President has increased the peanut planting by another 100,000 acres in spite of a fifty per cent overproduction. The same act provides that cotton planters may sow another 1,200,000 acres to cotton in spite of an oversupply of $750,000,000 now on hand. These increases are subject to the same price support now provided. If the price falls below a certain fixed level, and that level is high, the government will buy and hold the commodities off the market. Rules and regulations insure that these acreages will be planted, for if a planter fails to grow his allotted acreage one year he will be refused bonuses and government market if the next year he tries to go back to his original allotment without special approval.

Government control has shown itself to be inefficient and bunglesome. The British government loss on its nationalized railroads is running $1,000,000 per week. During the first World War Government operation of the United States railroads cost the taxpayers $2,000.000 daily. Under private operation during World War II the railroads paid the government $3,000,000 daily in taxes.

Our previous assaying into the Socialist State have been anything but reassuring. WE DON'T WANT ANY OF IT!

NEW NUTRITIONAL STUDY

ONCE AGAIN our surgeons have stressed the important position biochemistry has assumed in so many new achievements in the field of surgery the past decade. At the last Clinical Congress of the American College of Surgeons, a symposium on recent advances in water and electrolyte

balance, nutritional problems and related subjects, was presented by several of our leading medical experts who have contributed greatly to this particular subject. The speakers produced an amazing amount of new material in a short time, which was difficult to assimilate in the lecture period allotted them.

Aware of this situation, the College Committee on Water Balance and Nutritional Problems announced that plans had been conceived for the correlation of this information and its presentation in a monograph which would be available to the medical profession at a later date. The committee inferred that material would be added to make a complete summary of the present information on these subjects.

At a recent meeting in Detroit, a state committee on nutritional problems of the surgical patient was organized under the direction of Dr. Frederick A. Coller, to work with the national committee of the American College of Surgeons. This group will study the various aspects of transfusion, parenteral feeding, water and electrolyte balance, etc. This state committee will have the advantage of Doctor Coller's long and extensive experience with water and electrolyte balance, for he has been the chief exponent of this subject in the field of surgery, has published many excellent medical papers on the topic since his original publication in 1932 and has made surgeons everywhere acutely conscious of water balance and parenteral feeding.

Many lives have been saved by the judicious use of blood, proteins, water and electrolytes; complications of surgery have been prevented or greatly reduced, and operations have been made safer. Our present knowledge of the use of these adjuncts to surgery has also permitted us to expand the possibilities of applying operative procedures, and our patients have received untold benefits therefrom.

S.B.W.

ON THE RUN . . . .

Until the dentist, physician and patient develop a high index of suspicion regarding any slow-healing lesion or any unusual oral swelling, cancerous lesions will be diagnosed too late.

. . .

A mole, suspected of being malignant, should not be fulgurated. It should be widely excised through the entire skin and microscopically examined.

Wm. S. Reveno, M.D.

HISTORY OF CIRCUMCISION

(Continued from Page 574)

incapable of generation unless circumcised. In others it was a form of personal adornment or convenience, and in others it was a sign of reincarnation. In some of these tribal circumcisional ceremonies the boys were dressed as girls and the girls as boys during the rites which were often prolonged. In the Congo, drugs were used at times during the ceremonies.

The Samoans considered circumcision as a fertility rite, throwing the excised portions of the foreskin to the water lilies, their staple food.[15]

From a study of the type of circumcision used by primitive tribes it is possible to reconstruct with some accuracy the paths these tribes took many years ago as they migrated from area to area. This is indicated by the tracing of migration of the Australian aborigines from the Burmese peninsula to Malaya, Sumatra, Java, New Guinea, Cape York and then over Australia by the finding of the custom of subincision or whistlecocking in many of these areas today.

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A Century of Medical Education at the University of Michigan

On the first Wednesday in October of 1850, the Medical School of the University of Michigan, with a faculty of six professors and a building erected at a cost of $8,981, opened its doors to 90 students for a six months' course of instruction. This marked the dawn of medical education in Michigan. From this humble beginning, more than 10,000 Michigan alumni have gone to all parts of the world to contribute notably and significantly to the advance of medical science.

Contrasted to this start of 100 years ago, the present activities of the Medical School with its 496 students, 118 research projects, 175 faculty members, and extensive affiliated postgraduate teaching program, provide some indication of the development that has taken place.

From its inception, as the Department of Medicine and Surgery, the University's first professional school was dedicated to a threefold purpose: teaching, research and service. That the Medical School was founded on the basis of the advancement of basic scientific principles is clearly exemplified by the appointment of the following members to the original faculty: Dr. Abram Sager (famous for his work in Zoology), President and Professor of Obstetrics and Diseases of Women and Children; Dr. Silas H. Douglass, Professor of Chemistry, Pharmacology and Materia Medica; Dr. Moses Gunn, Secretary and Professor of Anatomy and Surgery; Dr. Samuel Denton, Professor of Theory and Practice of Medicine and Pathology; Dr. Jonathan A. Allen (a descendant of Ethan Allen), Professor of Therapeutics, Materia Medica and Physiology; and Dr. Zina Pitcher (a member of the University's Board of Regents from 1837 to 1852), Emeritus Professor of Obstetrics.

By 1854 the following members were added to the faculty: Dr. Alonzo B. Palmer, Professor of Materia Medica, Therapeutics and Diseases of Women and Children; Dr. Corydon L. Ford, Professor of Anatomy; and Dr. Edmund Andrews, Professor of Comparative Anatomy and Demonstrator of Human Anatomy.

An interesting characterization of the members of the original faculty is provided by R. C. Kedzie, an assistant to Dr. Gunn, and later head of the Chemistry Department at Michigan Agricultural College, in a letter to Dr. W. F. Breakey, written February 19, 1901: Sager, "exact and methodical most scholarly, but loaded down with so much learning as to make him hesitate 'for fear of some complication not discovered' "; Douglass, "who would spend a whole day to provide some explosive demonstration of a chemical law"; Gunn, "who was always loaded for a daring operation"; Denton, "who advised his pupils to 'keep the bowels of patients soluble' and 'to look out for the sequelae of scarlet fever' "; Allen, "the elegant and scholarly exponent of the facts and poetry of materia medica."

No reference to the first beginnings of the Medical School and the original faculty would be complete without some mention of the memorable character, Gregor "Doc" Nagele. His official position was that of janitor and bellringer, but his long association with the anatomist, Dr. Corydon L. Ford, resulted in the development of a proficient capableness when it came to anatomical demonstrations; ofttimes to the chagrin of younger instructors in the field!

The daily routine of the early students bears little resemblance to the comprehensive course of instruction available at the present time. The curriculum of 100 years ago consisted mainly of anatomy lectures and laboratory chemistry. Lectures were given two hours in the morning and two hours in the afternoon four days a week. Wednesday and Saturday mornings were devoted to clinics, such as they were, since until 1868 there existed no semblance of a hospital. The high point of the weekly medical program took place on Saturdays when students read and defended theses prepared on various topics.

Likewise, admission and graduation requirements for the student in 1850 would give the present-day student a feeling of being born just a century too late. Admission prerequisites, as recommended by the National Medical Association, consisted of a knowledge of English grammar, rhetoric and literature, natural philosophy, mathematics through geometry, and enough Latin

and Greek to enable the student to appreciate the technical language of medicine and read and write prescriptions.

To be admitted to the degree of Doctor of Medicine, the graduate had to exhibit evidence of having pursued the study of Medicine and Surgery for the term of three years with some respectable practitioner of medicine including lecture terms; he must have attended two full courses of lectures, the last one at the University of Michigan; he must be at least 21 years old; he had to submit a thesis written by himself to the faculty; and he must have passed a satisfactory examination at the close of his course of study. It should be noted that the lecture courses were six months long; from the first Wednesday in October to the first Wednesday in the following April.

These conditions prevailed until 1877, at which time the course was lengthened to nine months. In 1880, the instruction period was changed to demand three years' time for all students. By the year 1890, the professional course had been extended to four years and entrance requirements had been raised to the level of a high school diploma in the Classical or Latin course.

The length of the 1850 curriculum which amounted to about 500 hours course study provides an interesting contrast to the present-day curriculum requiring some 4,294 hours of study.

First contact with patients, a memorable occasion to the medical student of any age, occurs today at Michigan during the sophomore year in the wards of the large University Hospital. No such opportunity was available for the students in 1850. In fact, it was not until 1877 with the construction of the wooden pavilion hospital accommodating 60 patients that such facilities as an operating amphitheater, dressing rooms, and clinical instruction were provided. Nevertheless, even as early as 1851 and 1852 surgical operations were performed before the classes on the Ann Arbor residents who wished to avail themselves of the existent medical knowledge. And in 1868 a professor's residence was made available to be used as a hospital. Physicians brought their patients to this "hospital" early each morning of clinic days, Wednesday and Saturday. Medical students carried them from there on stretchers to the medical school for class demonstrations.

The lack of facilities for clinical instruction was the major cause of the extended controversy which constituted the early medical school's most difficult problem. In 1857 there was a tremendous agitation on the part of several faculty members to have the school moved to Detroit. Many of

The first home of the University of Michigan Medical School, the Department of Medicine and Surgery Building, as it was in 1850.

the professors lived in Detroit and probably desired the move in order that they could enjoy the personal advantages of a more extended medical practice. The agitation was quelled only to arise again with renewed vigor thirty years later. By that time the course of study had been extended from six to nine months, and the removal to Detroit of just the clinical instruction courses was defeated in the best interests of keeping the University all in one place by requiring the professors to live in Ann Arbor during the nine months of the study course.

The West Medical Building at the University of Michigan, built in 1903, is one of the two structures which now make up the Medical School. It contains the offices of the Medical School as well as laboratories of the departments of pathology and physiological chemistry.

Another early problem of the medical school centered about the establishment of a Department of Homeopathy. This controversy began in 1867 and by 1875 it achieved success with the Legislature's authorizing a separate Homeopathic Medical College. However, by 1921 enrollment in the Homeopathic Medical School had dropped to a point that seemed inadvisable to continue its existence, so the Legislature passed a resolution requesting the Board of Regents to consolidate the two separate Medical Schools. This the Board of Regents did in 1922.

The inevitable question of women students confronted the faculty, who took the position in 1870 that "in their judgment, the medical-coeducation of the sexes is, at least, an experiment of doubtful utility and one not calculated to increase the dignity of man nor the modesty of women." However, the historical records of 1870 indicate that a resolution permitting women to attend the Medical School was adopted, and in October of that year 18 women embarked on a medical career. Miss Amanda Sanford of Auburn, New York, is reported to be the first woman graduate of the Medical School. But it must not be left unsaid that it was not until 1881 that separate classes of instruction were conducted for the ladies because of the feeling on the part of the faculty relating to "the difficulties of restraining improprieties of deportment and checking insubordination."

Any understanding of the century of development of the Medical School is almost dependent upon a chronological exposition of the growth of the individual departments with reference to the professors who highlighted the way. Naturally,

such people as the Deans have played an important role in the over-all development, and they appeared on the scene in the following order: Abram Sager, Samuel Denton, Silas H. Douglass, Moses Gunn, Corydon L. Ford, Alonzo B. Palmer, Victor C. Vaughan, Hugh Cabot, Frederick G. Novy, and Albert C. Furstenberg, the present dean.

The East Medical Building at the University of Michigan, erected in 1925, houses the departments of anatomy, bacteriology and physiology.

These names are inextricably bound up with those many other outstanding individuals that have passed through the laboratories, clinics and lecture halls that constitute the Medical School.

The manner of departmental growth over 100 years is at best a very difficult process to trace in a concise fashion, but the rough outline that follows gives one a fair approximation of how this process took place.

ANATOMY, the backbone of a medical education, had its beginning with the founding of the Department of Medicine and Surgery in 1850. Moses Gunn became the first of a distinguished list of anatomy professors. Closely following him was Corydon L. Ford in 1854 of whom it is said that in his day he probably taught more students than any other teacher of anatomy. Five years after the completion of the new $6,000 building in 1889, whose timber-supported roofs made the second floor laboratory look very much like a hunting lodge, James P. McMurrich joined the faculty. His thirteen years of outstanding service were terminated in 1907 at which time George L. Streeter became the fourth professor of Anatomy. In 1909 he established the Loan Collection of Bones, thereby greatly improving the teaching of osteology. With his resigning in 1914, G. Carl Huber became the department head. His tremendous interest in neurological material resulted in the development of a laboratory of Comparative Neurology and the collection of one of the world's largest series of brains and spinal cords of various animals. Elizabeth C. Crosby came to work with Dr. Huber in 1920 and has continued to this day to develop new areas in neuroanatomy. The present director of the anatomical laboratories, Bradley M. Patten, famous for his work in Embryology, joined the staff in 1935.

In the second semester of 1880-81, Dr. Henry Sewall began his service in PHYSIOLOGY, and in June 1882 he was made the first professor of physiology at the age of 27. Under Dr. Sewall's

leadership a new era began in the school. Purely didactic teaching gave way to class demonstrations and to the experimental approach. Dr. Sewall's discovery of the immunization of pigeons to rattlesnake venom is recognized as the forerunner of the development in Europe which led to the finding of diphtheria antitoxin. Closely associated with Dr. Sewall in this period was Dr. Victor C. Vaughan, who became in 1883 the first person in the United States to hold a professorship in Physiological Chemistry on a medical school faculty. He reported that when he began teaching in 1875, the Medical School owned but two poor microscopes. It is related that these two gentlemen and scientists would spend Sunday afternoons sitting on a hill overlooking the Huron River and discuss the "germ theory" of Pasteur and Koch. In 1889, Dr. Sewall resigned because of tuberculosis, and he was succeeded for a brief period from 1890 to 1892 by W. H. Howell. In 1892 Warren P. Lombard became professor of physiology and held this position until his retirement in 1923, at which time Robert Gesell, the present head of the Physiology Department, was appointed.

In 1922, Dr. Howard B. Lewis was appointed professor of physiological chemistry to succeed Dr. Vaughan and the name of the department was changed in 1935 to Biological Chemistry.

Although HISTOLOGY was recognized as a separate subject in 1877 when Charles H. Stowell taught the course in Microscopical Anatomy, it was not until 1883 that a separate chair of Histology and Microscopy was established. Even as far back as 1869 there are references which indicate that Ford gave demonstrations in histological structures.

Modern PATHOLOGY at Michigan began with the appointment of Heneage Gibbes in 1887, who came from Westminster College, London, England. However, it was under Aldred S. Warthin that Pathology made its greatest strides. He joined the staff in 1891 as an assistant to George Dach of the Department of Internal Medicine, with which Pathology was merged in 1895. Warthin became an outstanding man in the field, raising the standards of Pathology, and doing his epochal work in developing the pathological knowledge of latent syphilis. Warthin died in 1931 and was succeeded by the present chairman of the department, Carl V. Weller.

It is said that Warthin was quite willing that the students should swear at him while here, if they would swear by him after they were out in the practice of medicine.

With the appearance in 1889 of Charles De

Albert C. Furstenberg, M.D., Dean of the University of Michigan Medical School, 1950.

Nancrede ("I'm a medical who operates") the Department of Surgery began to take shape. He was characterized as "an excellent diagnostician who opposed the then common dangerous practice of exploratory laparotomy as a diagnostic measure." During the war with Spain, he went to Cuba as a Chief Surgeon in the U. S. Army. Following De Nancrede, who died in Detroit in 1921, Cyrenus G. Darling was put in charge of the Department. He was succeeded in 1919 by Hugh Cabot whose "use of double negatives, and of simple earthy figures of speech and allegories served admirably to emphasize certain points which made his discourses vivid and interesting." In 1921 Cabot became dean of the Medical School, resigning this position in 1930. Frederick A. Coller, the present chairman of the Department of Surgery, well known among his contemporaries as an outstanding surgeon and as president of the American College of Surgeons, came to the school in 1920.

With the experimental work by Pasteur that began in 1881, the field of Immunology began to come into its own. So, in order to obtain first-hand knowledge of bacteriological techniques, Vaughan and Frederick G. Novy journeyed to the Hygienic Institute at the University of Berlin in 1888. As a result, the first systematic lectures on the subject began at Michigan in the fall of 1888

in Vaughan's course, Sanitary Science. However, from 1891 to 1934 the formal lecture course on General Bacteriology was presented by Novy who was made a full professor in 1902. In 1903, because of the frequency of outbreaks of rabies in the state, the Pasteur Institute was set up as a part of the University's Hygienic Laboratory. Novy, who later became dean of the Medical School, was succeeded by Malcolm H. Soule, the present professor of bacteriology.

PHARMACOLOGY began in the modern sense with the appointment of J. J. Abel in 1890 to the Chair of Materia Medica and Therapeutics at an annual salary of $2,000. Abel's service lasted only until 1893 when he resigned to go to Johns Hopkins University. He was followed by Arthur R. Cushny, acclaimed the father of the idea of the biological assay of drugs. He was an outstanding man and made notable contributions concerning Kidney Physiology and the Action of Optical Isomers. When Cushny left in 1905 to organize the teaching of pharmacology at University College, London, England, Charles W. Edmunds was appointed head of the department. In 1910, Pharmacology was moved from the old medical building to the Chemical Building. Edmunds was succeeded by Maurice H. Seevers in 1941, the present head of the department.

INTERNAL MEDICINE may be said to have had its beginning with the arrival in 1891 of George Dock, who is remembered for his many fine qualities and important innovations he introduced into medical teaching. He was instrumental in organizing laboratory methods of teaching and in reorganizing the course in Oscultation and Percussion. His most outstanding contribution lies in his description of the first case of Coronary Thrombosis. Dr. Dock resigned in 1908 to go to Tulane University, and Albion W. Hewlett was appointed professor of internal medicine. Hewlett was one of the first men to hold the Chair of Medicine whose chief interest lay in the functional rather than in the structural aspects of disease—pathological physiology rather than pathologic anatomy. In 1916 Nellis B. Foster succeeded Hewlett who had gone to Stanford University. He served in this position only a short time and then entered the Army Medical Corps as the United States had entered World War I. On his departure, Harry Newburgh was made acting head of the department. Following the war, Louis M. Warfield received the appointment to professor of medicine in 1922 and held this position until 1925 when he resigned to go to private practice in Milwaukee. James D. Bruce became chairman of the department for the years 1926 through 1928 at which time he resigned to become chairman of the department of Postgraduate Medicine and Vice President of the University in charge of University Relations. During his chairmanship of Internal Medicine, the Tuberculosis Unit was started, an allergy service was developed and the University received the gift of the Simpson Memorial Institute for Medical Research. Dr. Bruce's vacancy was filled by Cyrus C. Sturgis, the present chairman of the Department of Internal Medicine (with its present membership of approximately 60 members as contrasted to the two members in 1891) and Director of the Simpson Memorial Institute.

For nearly forty years medical students at the University were graduated without having been required to witness a case of labor or a childbirth. However, it is reported that Dr. Sager performed one of the first, if not the first, Caesarian sections in Michigan in 1871. His patient died of peritonitis, and perhaps it was fortunate that Michigan did not have a hospital for twenty years, since almost one-half of the women confined in hospitals died of puerperal sepsis. After the hospital opened in 1877 and until 1898, there were about eleven or twelve confinement cases a year for clinical purposes. In 1901, Reuben Peterson became the professor of diseases of women and children. This marks the beginning of a DEPARTMENT OF OBSTETRICS AND GYNECOLOGY. After thirty years of service, Dr. Peterson resigned as head of the Department of Obstetrics and Gynecology. He was succeeded by Norman F. Miller, the present chairman. With the recent completion of the new Maternity Hospital, facilities for obstetrical and gynecological instruction of medical students are the finest available.

OTOLARYNGOLOGY originated as a separate department in 1904 under the direction of Roy Bishop Canfield. He established his operating room in the basement of the surgical wing of the old hospital built in 1889, beneath the stairway leading to the main surgical amphitheater. Albert C. Furstenberg, dean of the Medical School, is the present chairman of the department.

OPHTHALMOLOGY also came into being as a separate department in 1904 with the appointment of Walter R. Parker as Clinical Professor of the Diseases of the Eye. Upon Dr. Parker's resig-

nation in 1932, he was succeeded by George Slocum. Unfortunately, Dr. Slocum served only a short while until his death in March, 1933. He was succeeded by F. Bruce Fralick, the present Professor and Chairman of the Department of Ophthalmology.

Closely following these two departments, DERMATOLOGY developed in 1905 with the appointment of William F. Breakey as Professor of Dermatology and Syphilology. Upon his retirement in 1912, Udo J. Wile was made head of the department. Until his retirement within the last year, Dr. Wile had striven to build these clinics into one of the country's most active centers in these fields. His successor and the present Chairman of the Department is Arthur C. Curtis.

PSYCHIATRY AND NEUROLOGY operated as joint departments until their separation in 1920. However, in 1906 Dr. Bair was appointed Professor of Psychiatry and Diseases of the Nervous System. It was in this year that the new Psychiatric Hospital was opened. In the following year, Carl D. Camp received an appointment as Professor of Neurology, and Albert Barrett became Professor of Psychiatry and Diseases of the Nervous System. When the fields were split into separate departments in 1920, Dr. Camp became chairman of the Department of Neurology, a position which he held until his recent retirement. He was succeeded by Russell DeJong. In 1936 Raymond W. Waggoner was appointed Professor of Psychiatry and Chairman of the Department. His present office is located in the Neuropsychiatric Institute completed in 1939 and adjoining the University Hospital.

The present Department of PEDIATRICS AND INFECTIOUS DISEASES may be said to have had its beginning in 1910 with David M. Cowie. He inaugurated pediatrics in the modern sense and is well known for instituting contagious techniques that made it possible to bring contagious patients all under one roof at the same time. It is significant that in this period the present Contagious Hospital was constructed in 1914. Dr. Cowie was succeeded upon his death on January 27, 1940, by Charles F. McKhann. Following Dr. McKhann, James L. Wilson became Professor and Chairman of the Department of Pediatrics and Communicable Diseases, as it is now known.

Although the first reference to ROENTGENOLOGY appeared in a University calendar in 1901-02, it was not until about 1910 that James Van Zwaluwenberg first organized an x-ray laboratory. By 1913 a full-fledged Department of Roentgenology had been established. Upon Dr. Zwaluwenberg's death from pneumonia in 1922, Preston M. Hickey was appointed Professor of Roentgenology. It is interesting to note that the first radium owned by the Department was purchased in the year 1928. Dr. Hickey's intensely active and valuable service to the University came to a close with his death on October 30, 1930. In the following January, Fred J. Hodges was appointed by the Regents to become Professor and Chairman of the Department.

The present departmental organization was completed with the establishment in 1924 of the division of ORTHOPEDIC SURGERY under the direction of Carl E. Badgley; the appointment in 1930 of Max M. Peet to Professor of Surgery, who until his death in 1949 was in charge of the division of Neurosurgery; and the appointment of Reed M. Nesbit in 1931 as head of the division of Urology.

The Medical School's outlook at the beginning of its second century of existence points toward a pattern of continued development. Chief encouragement for such a program is derived from the recent generous gift of $3,000,000 from the Kresge Foundation which is to be used for construction of a Medical Research Center. Additional clinical facilities will be available with the erection of the contemplated Out-patient Clinic adjoining the present 981-bed University Hospital. On the research front activities have been greatly expanded with the signing of a contract for a contemplated five, and possibly, ten year project to be conducted for the Atomic Energy Commission on a study of the biological effects resulting from irradiation exposure. And finally, immediate steps are already underway to expand the freshman class to the unprecedented total of 200 medical students beginning with the fall of 1950.

The most common clinical picture of oral cancer is a coarsely granular ulcer with indurated, raised, rolled edges.

• • •

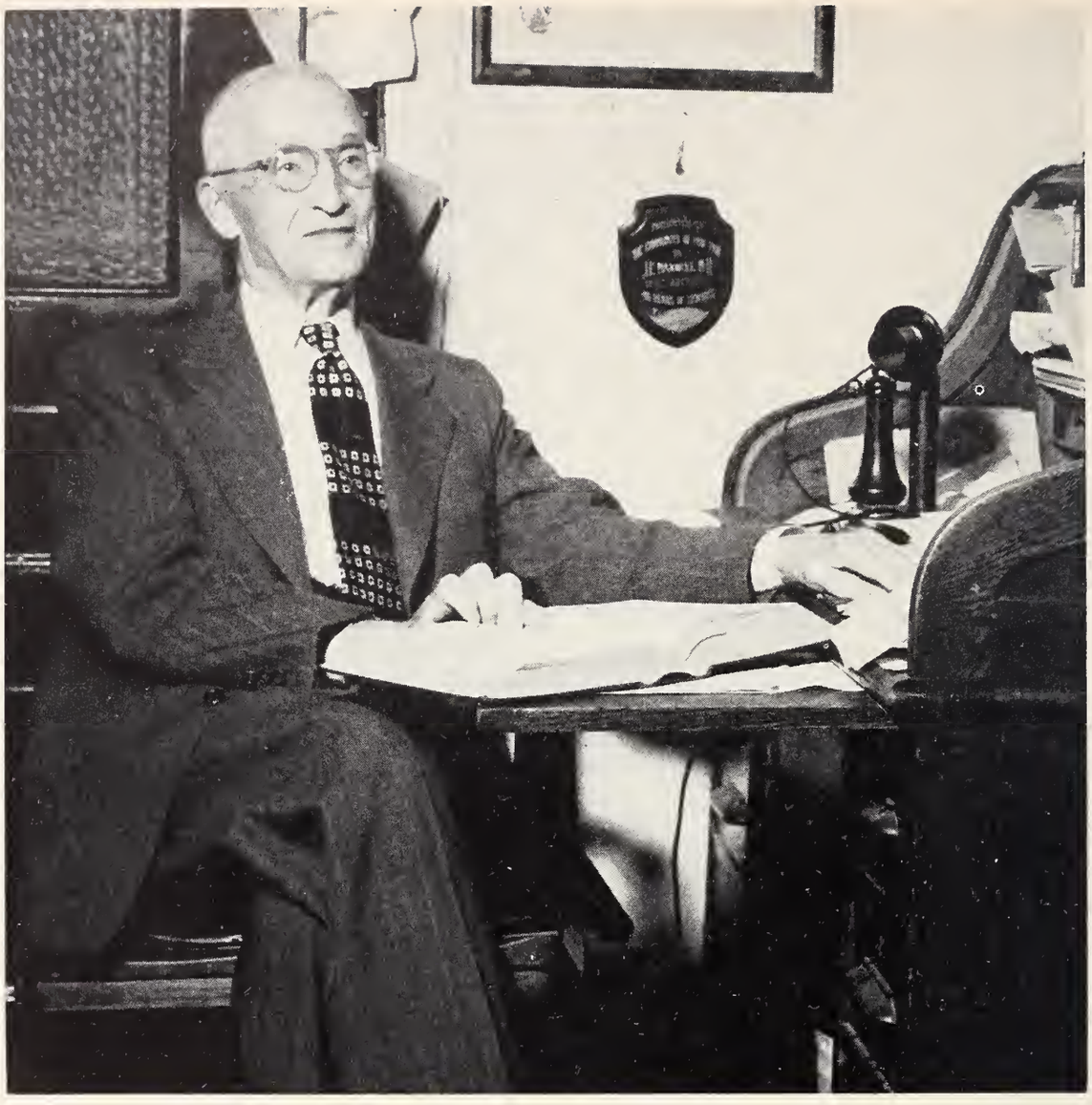
Cancer of the mouth may be confused with Vincent's stomatitis, herpes, syphilitic gumma and lesions caused by biting mouth tissues.

• • •

Often first indications of cancer of the tonsil, base of the tongue or palate are cervical node metastases.

• • •

If mouth cancer is discovered early, it is relatively easy to treat and the chances of cure are good.



John C. Maxwell, M.D.

"A Half Century of Service"

The calendar on the wall gave the date as July 2, 1895. A tall young man with a flowing black mustache gazed proudly at the gilt letters on the glass door of his new office, just one floor up from the muddy main street of Paw Paw, Michigan, population 1,700.

The sign read—"J. C. Maxwell, M.D."

Fifty-five years have passed. The muddy main street is now an integral part of bustling US-12. The sign is on another door, still one flight up from the street, and the gilt letters are nearly gone, brushed away by countless hands in search of assistance.

But the sign isn't needed anymore. A half century of devoted and skilled service to the residents of Paw Paw and Van Buren County have made Dr. John Charles Maxwell's name a byword and his office as familiar as the front parlors of home.

And last summer the men who know best what his service has meant, his fellow physicians of the Van Buren County Medical Society, named him "Van Buren County Doctor of the Year."

It is probably a small honor compared to those medical men who have gone on to win Nobel prizes for research and discovered such modern miracles as sulfa and penicillin. But measured in terms of 2,000 babies delivered without the loss of a mother, thousands of broken bones mended; mumps, measles, whooping cough, pneumonia and common colds overcome; rigorous medical service

during two world wars and an endless chain of emergency calls in snow and rain, day and night, on foot, in horse and buggy and by automobile—then such an award begins to have a personal and human value that no Nobel prize can ever reach.

Dr. Maxwell, now a white-haired man of eighty-four, came to Paw Paw fresh from the University of Michigan Medical School. A native of Hamilton township, near Decatur, Michigan, he had decided to follow the medical footsteps of his brother, the late Dr. James E. Maxwell, who was practicing in Decatur, at the turn of the century.

"Being a country doctor was a tough profession in the old days," Dr. Maxwell recalls. "My first equipment was crude, the medicines and drugs limited and working conditions unbelievable."

Things got a bit better for the doctor in 1908 when he bought his first automobile. But for years the country roads were so poor that he had to go back to the horse and buggy frequently.

Dr. Maxwell's most trying times came during the late days of World War I. In 1917-18 he was the only doctor examining military candidates in the entire county.

"Besides my regular practice I had about 15 soldier-boys a day and around 100 each weekend to examine," he says with a sigh.

But what he likes to remember is that not one man he ever sent to Fort Custer for army service was ever returned for medical reasons. During World War II when he handled hundreds of ear and throat examinations of Van Buren County young men, his amazing record held up.

In November, 1918, the deadly influenza epidemic which swept the United States hit Van Buren County full force. It found Dr. Maxwell the only physician in Paw Paw. For the next three months he worked an average of twenty-two hours a day battling some 600 cases of the influenza along with his regular practice.

And again the invisible but unforgettable record pops up. Of the 600 odd cases of influenza which struck the Paw Paw area, Dr. Maxwell lost only five. And these were mostly beyond aid. Elsewhere in the county the epidemic took thousands of lives.

In the years which followed, Dr. Maxwell has continued his quiet service to his people. He has taken perhaps five vacations in the last half century and then for only a few days. Until five years ago he never had a hospital nearby. Instead he had to ship his patients by baggage car on the old Fruitbelt Railroad to Kalamazoo, Mich., hospitals.

John Charles Maxwell, M.D., "Michigan's Foremost Family Physician for 1949" displays testimonial scroll to a proud son, James H. Maxwell, M.D., Professor of Otology and Laryngology at the University of Michigan.

For years his fee was $1 a call and 50 cents at the office. He sent out bills once a year.

"I guess I've crossed $100,000 off my books for folks who just forgot to pay," he says.

Dr. Maxwell has also given medicine one of its top men—his son, Dr. James Maxwell, professor of otolaryngology at the University of Michigan, a recognized authority in the field of ear and throat medicine.

A daughter, Katherine Maxwell, has also devoted her life to medicine. She is records analyst at the Rapid Treatment Center in Ann Arbor, Michigan.

The white-haired physician has a simple creed. "The practice of medicine isn't a trade or a commercial thing," he says. "It's a way of life."

Three generations of Van Buren County residents can testify that Dr. J. C. Maxwell, their Doctor of the Year and Michigan's Foremost Family Physician for 1949, has lived it well.

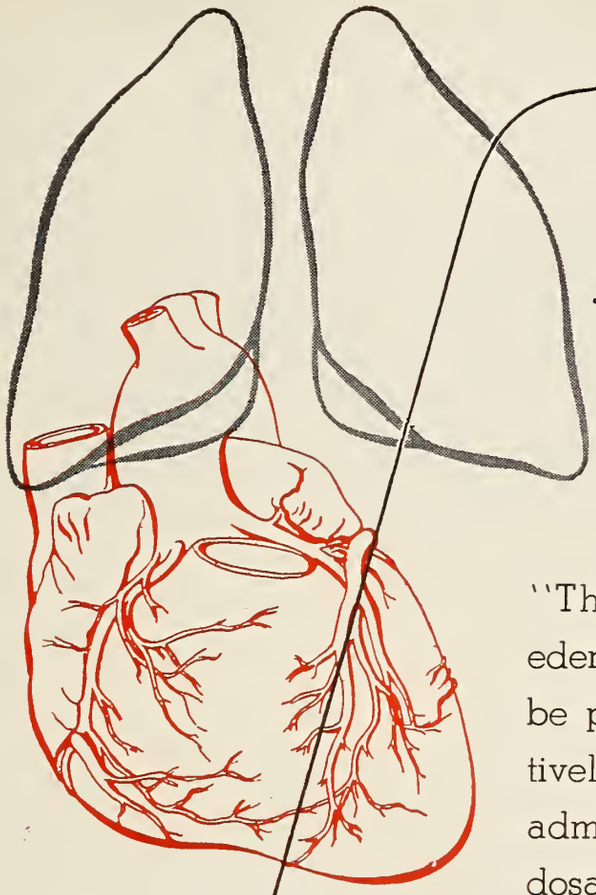
No busy man should object to devoting at least a little of his time to help along others who have fared less fortunately, particularly friends in need of the counsel of experience.

PRELIMINARY OUTLINE OF 1950 ASSEMBLY SPEAKERS

85th Annual Session, Michigan State Medical Society

Detroit, September, 1950

Time	Wednesday September 20	Thursday September 21	Friday September 22
A.M. 8:30	Registration. Exhibits open.	Registration. Exhibits open.	Registration. Exhibits open.
9:00	*Surgery* Raymond W. McNealy Chicago, Ill.	*Gynecology* Hebrert F. Traut San Francisco, Calif.	*Medicine* Fredrick F. Yonkman Summit, N. J.
9:30	*Medicine* Charles A. Doan Columbus, Ohio	*Otolaryngology* Paul M. Moore, Jr. Cleveland, Ohio	*Syphilology* Louis A. Brunsting Rochester, Minn.
10:00	Intermission to View Exhibits.	Intermission to View Exhibits.	Intermission to View Exhibits.
11:00	*Radiology* William E. Chamberlain Philadelphia, Pa.	*Pediatrics* Charles F. McKhann Cleveland, Ohio	*General Practice Period* Priscilla White Boston, Mass.
11:30	*Dermatology* Earl W. Netherton Cleveland, Ohio	*Public Health & Preventive Medicine* Karl F. Meyer San Francisco, Calif.	*Nervous & Mental Diseases* Frederick A. Gibbs Chicago, Ill.
12:00	5 Section Meetings *Dermatology* Earl W. Netherton Cleveland, Ohio *Radiology* William E. Chamberlain Philadelphia, Pa. *Urology* George C. Prather Brookline, Mass. *Gynecology-Obstetrics* Samuel A. Cosgrove Jersey City, N. J. *Ophthalmology* Harold W. Brown New York, N. Y.	4 Section Meetings *Pediatrics* Charles F. McKhann Cleveland, Ohio *Surgery* James T. Priestley Rochester, Minn. *Otolaryngology* Paul M. Moore, Jr. Cleveland, Ohio *Public Health* Karl F. Meyer San Francisco, Calif.	4 Section Meetings *Pathology* John R. McDonald Rochester, Minn. *Medicine* Fredk. F. Yonkman Summit, N. J. *General Practice* Priscilla White Boston, Mass. *Nervous & Mental Diseases* Frederick A. Gibbs Chicago, Ill.
P.M. 1:30	*Pediatrics* Lee F. Hill Des Moines, Iowa	*Medicine* Antonio Rottino New York, N. Y.	*Surgery* William F. Rienhoff, Jr. Baltimore, Maryland
2:00	*Urology* George C. Prather Brookline, Mass.	*Surgery* William A. Altemeier Cincinnati, Ohio	*Pediatrics* William L. Bradford Rochester, N. Y.
2:30	*Obstetrics* Samuel A. Cosgrove Jersey City, N. J.	General Practice Period William F. Mengert Dallas, Texas	*Pathology* John R. McDonald Rochester, Minn.
3:00	Intermission to View Exhibits.	Intermission to View Exhibits.	Intermission to View Exhibits.
4:00	*Ophthalmology* Harold W. Brown New York, N. Y.	*Obstetrics* John L. McKelvey Minneapolis, Minn.	*Surgery* Warren H. Cole Chicago, Ill.
4:30	*Surgery* Harris B. Shumacker, Jr. Indianapolis, Ind.	*Surgery* James T. Priestley Rochester, Minn.	*Medicine* Edw. L. Bortz Philadelphia, Pa.
5:00	Discussion Conferences	Discussion Conferences	Discussion Conferences
8:30	Officers Night Biddle Oration J. O. Christianson, Ph.D. Saint Paul, Minn.	10:00 p.m. State Society Night	END OF ASSEMBLY



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SEARLE *RESEARCH IN THE SERVICE OF MEDICINE*

1. Barach, A. L.: Edema of the Lungs, Am. Pract. 3:27 (Sept.) 1948.

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

The American Board of Preventive Medicine and Public Health has certified seventeen Michigan public health physicians engaged in full-time public health work as qualified diplomates of the Board.

They include A. E. Heustis, M.D., State Health Commissioner; J. K. Altland, M.D., and John A. Cowan, M.D., of the Michigan Department of Health; George C. Stucky, M.D., Director of the Eaton County Health Department; Hugh B. Robins, M.D., Director of the Calhoun County Health Department; Robert F. Hall, M.D., Director of the Isabella County Health Department; W. B. Prothro, M.D., Director of Kalamazoo City-County Health Department; Roelof Lanting, M.D., Director of the Lansing-Ingham County Health Department; J. G. Molner, M.D., Detroit Health Commissioner; Merle R. French, M.D., Director of the Branch-Hillsdale District Health Department; M. R. Kinde, M.D., and B. G. Horning, M.D., of the W. K. Kellogg Foundation, Battle Creek; Thomas Francis, Jr., M.D., of the School of Public Health, University of Michigan; Franklyn H. Top, M.D., Herman Kiefer Hospital, Detroit; M. B. Beckett, M.D., Veterans Hospital, Saginaw; J. P. Gray, M.D., Parke Davis Company, Detroit and I. W. Sander, M.D., of Detroit.

Three other diplomates were in Michigan public health positions at the time of their certification. They are Kenneth Markuson, M.D., formerly with the Michigan Department of Health; Clarence Dale Barrett, M.D., formerly with the Detroit City Health Department and Henry C. Huntley, M.D., who resigned as Director of the Lenawee County Health Department, May 1. All have taken positions out of state.

The February 1950 issue of the *Journal of Immunology* carried a paper on "A Modified Habel-Sockrider Ultraviolet Irradiation Apparatus for Use in Serum and Vaccine Production," prepared by Dr. J. T. Tripp, Virginia Boseman and Beth Berry of the Division of Laboratories, Michigan Department of Health.

The Michigan Department of Health is on the air over Radio Station WKAR, East Lansing at 10:30 a.m. each Tuesday, 870 on your dial.

Broadcasts scheduled for May and June follow:

May 2—Spoil Your Baby Just Enough—Dr. Goldie Corneliuson, Chief, Section of Maternal and Child Health
May 9—The Eyes Have It—Miss Caroline Austin, Vision Consultant
May 16—Iodized Salt—A Michigan MUST—Dr. Albert E. Heustis, State Health Commissioner and Miss Marjorie Delavan, Chief, Section of Education.
May 23—"The Better to Hear You"—Courtney Osborn, Hearing Consultant
May 30—What Better Memorial than Health Protection—Dr. Albert E. Heustis, State Health Commissioner
June 6—Flies Can Cross Your Borders—LaRue Miller, Chief, Section of Environmental Sanitation
June 13—Tips for that Trip Away from Home—Dr. Albert E. Heustis, State Health Commissioner
June 20—Building or Buying a Dream: Sanitary Requirements—John Hepler, Director, Division of Engineering
June 27—Home Care of the Sick—Miss Helene Buker, Chief, Section, Public Health Nursing

The main laboratory and the branch laboratories of the Division of Laboratories, Michigan Department of Health, have been equipped with sufficient supplies of snake anti-venin. These laboratories will handle calls 24 hours a day, seven days a week for this serum. The individuals in the various laboratories who may be contacted are as follows:

Lansing Laboratory
Mrs. Julia Hopkins—Telephone No. 4-4936
Mrs. Marion Baker—Telephone No. 5-0617
Grand Rapids Laboratory
Dr. P. L. Kendrick—Grand Rapids 7-2151
Miss Katherine Chase—Grand Rapids 8-2877
Mr. Henry Sikkema—Grand Rapids 5-1492
Houghton Laboratory
Miss Ora M. Mills—Houghton 209R
Mr. Kenneth Carbaugh—Houghton 2257W
Powers Laboratory
Miss Marian Sprick—Hermansville 5576
Mrs. Mildred Pellegrini—Norway 5294

The Michigan State Police have been notified.

To expedite the Michigan vision conservation program, the Michigan Department of Health and Michigan State Normal College are co-operating in a short course to train additional vision screening technicians for employment in local areas of the state.

Local Health Departments and schools are being urged to find the persons they wish to have trained to do the vision testing locally. Services of the vision consultant of the Michigan Department of Health will be available to help with educational phases of the vision conservation program in areas where there are trained technicians to do the testing.

For the short course which will be held in Ypsilanti, June 26 to 30, some subsidies are available. Registrations will be limited to those recommended by the local health departments and schools. They should be made through the Section of Recruitment and training of the Michigan Department of Health.

Five mobile tuberculosis case-finding units of the Michigan Department of Health will make chest x-rays at Michigan's summer fairs and festivals. Their visits are now being scheduled. The mobile units which use 70 mm. film will be sent to as many fairs as possible. The fair surveys reach many people who otherwise

(Continued on Page 592)

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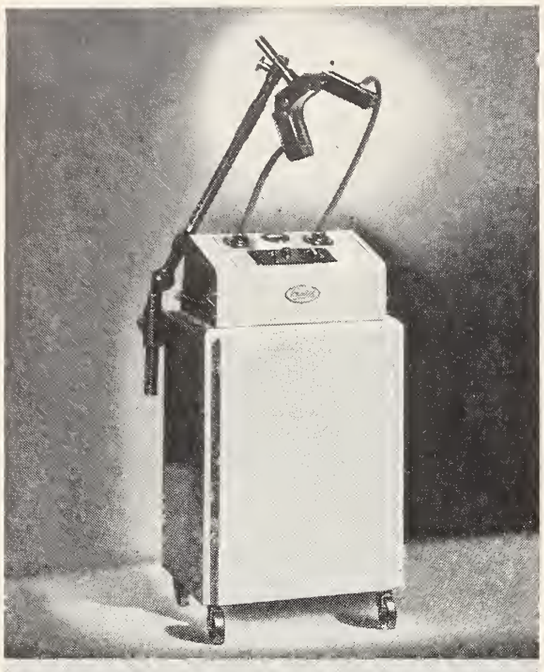

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(Continued from Page 590)

would not have chest x-rays. A total of 51,724 persons had chest x-rays at 32 Michigan fairs and festivals last summer. The x-rays revealed 1,318 chest abnormalities of which 485 were suspect reinfection tuberculosis.

Approximately sixty water treatment plant operators in the state will take examinations for certification on June 7, 1950. Certification assures competent qualified operators and thus protects the safety of municipal water supplies. The examinations will be held in Grand Rapids, Lansing, Detroit and one Northern Peninsula city.

Revised rules and regulations for tuberculosis control were given immediate effect by the Governor of Michigan, February 23, 1950. The revisions cover many phases of tuberculosis control. Copies of the revised regulations can be obtained from the Division of Tuberculosis and Venereal Disease Control, Michigan Department of Health.

A five-year two-fold program of instruction and research in family living will be developed at Wayne University under an $8,000 grant from the Michigan Department of Health. The program will have two objectives. One will be undergraduate information and research in family living. The other will be an integrated multi-professional program in child growth and development and family living as a part of professional education.

Report of the 1949 ragweed pollen survey of the Michigan Department of Health will be printed in the May issue of "Michigan Public Health" which will be out in late May. Reprints of the report, which include maps showing areas of least pollen concentration and fewest days with significant pollen concentration in 1949 and past years, will be available without charge from the Michigan Department of Health.

The Michigan Department of Health's fair side show method of venereal disease education, which in its first two years gained national attention and set the pattern for some other states, will be continued this year.

The fair tent-show technique brings venereal disease educational materials to the midway where they reach many people who would not be reached by the other usual channels of educational information.

More than 34,237 saw the educational motion pictures and received venereal disease facts at eight county fairs last year.

A new sound-color-film on diagnosis of breast cancer prepared for professional groups has been added to the Film Loan Library of the Michigan Department of Health. Other new films and strips cover such subjects as preparation of the baby's formula, dairy plant sanitation and farm fires.

"Breast Cancer: The Problem of Early Diagnosis" a

(Continued on Page 594)

An Observation on the Accuracy of Digitalis Doses

Withering made this penetrating observation in his classic monograph on digitalis: "The more I saw of the great powers of this plant, the more it seemed necessary to bring the doses of it to the greatest possible accuracy."[1]

To achieve the greatest accuracy in dosage and at the same time to preserve the full activity of the leaf, the total cardioactive principles must be isolated from the plant in pure crystalline form so that doses can be based on the actual weight of the active constituents. This is, in fact, the method by which Digilanid® is made.

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Average dose for initiating treatment: 2 to 4 tablets of Digilanid daily until the desired therapeutic level is reached.
Average maintenance dose: 1 tablet daily.
Also available: Drops, Ampuls and Suppositories.

1. *Withering, W.:* An account of the Foxglove, London, 1785.
2. *Rimmerman, A. B.:* Digilanid and the Therapy of Congestive Heart Disease, Am. J. M. Sc. *209:* 33-41 (Jan.) 1945.

Literature giving further details about Digilanid and Physician's Trial Supply are available on request.

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(Continued from Page 592)

16 mm. sound-color-film produced by the American Cancer Society, shows in animation and clinical photography how the physician can reduce mortality from this most common site of cancer among women. It shows the complete examination including inspection, palpation and transillumination, and biopsy, the only certain means of distinguishing between benign and malignant tumors, and concludes with a discussion of the physician's role in the post-operative management of the patient, and with a plan for thorough examination, accurate diagnosis and effective treatment. It is for professional groups only.

Official steps and agreement have been completed by the Washtenaw County Board of Supervisors and the City Council of Ann Arbor to bring about the merger of their health departments effective July 1, 1950. The resulting health department will serve Washtenaw county in its entirety and will be known as the Washtenaw County Health Department. The address of the county health department will be retained.

Venereal diseases in Michigan are giving way before the concentrated treatment, contact-tracing and education programs.

New syphilis cases have declined more than half (51.6 per cent) since the peak year of 1946. The 1949 total of 8,740 new cases was the smallest number reported since 1937. The greatest decline was in infectious primary and secondary syphilis cases where the total was about one-fourth that of 1946. For the first time in ten years, the incidence of congenital syphilis showed a decided decrease. During the past ten years, an average of 500 cases was reported each year. In 1949 the number was cut to 368.

New gonorrhea cases reported in the state have declined about one-fourth (24.5 per cent) since the peak year, 1946. The 1949 total of 9,427 cases of gonorrhea was the smallest number reported since 1942.

Much of the decline in venereal disease in Michigan can be credited to the use of penicillin in treatment of both syphilis and gonorrhea, to the operation of the Michigan Rapid Treatment Center in Ann Arbor, to speedy contact tracing by health departments and to the broader use of educational information.

More than 12,000 cases of venereal disease, mostly infectious primary and secondary syphilis have been treated in the Michigan Rapid Treatment Center, Ann Arbor, since it opened in 1944. During the past year, free penicillin for the treatment of gonorrhea has been made available to physicians of the state, through the Michigan Department of Health.

Recent foreign visitors in the Department included: E. B. O'Grady, representing a veterinary biologics house in Buenos Aires, Argentina; Dr. Gerda Ludwig, a German psychologist, Dr. Kusomoto, Chief of Health Centers, Ministry of Welfare, Japan; and Maria Steffens, a nurse from Weisbaden, Germany.

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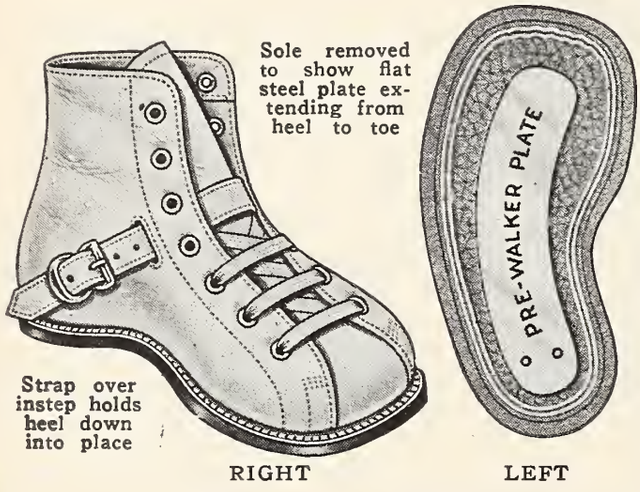

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The Sabel line includes, in addition to the Pre-Walker, the Sabel Club Foot, Brace, Pigeon-Toe, and Surgical shoes.

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Communications

My Dear Dr. Foster:

This is to let you know how much I appreciated my visit to Detroit and the program of The Fourth Annual Michigan Postgraduate Clinical Institute.

I enjoyed, especially, the Discussion Conference on Cancer—by Crile, Diehl, Senear, Moore and Price. They are great men.

The talk by Dr. Penberthy was just right before a public meeting. Dr. Thieme's discussion of gall bladder disease and the paper on the use of vitamins were practical and timely.

In part all the papers and discussions were of high class. The paper by Dr. Hill of Grand Rapids was excellent, but too much for a twenty-minute discussion. The paper by Dr. Maxwell was timely, practical and showed many points of value for the men in general practice though a little rough on some who demand a larger fee for questionable radium treatment. Now, Dr. Foster, I want to thank you, especially, with Doctor Barstow and all the members of the Michigan State Medical Society for the interest they have shown in choosing a "Doctor of the Year." I am very happy to have had the honor scroll presented to me. It is something I can hand down to my children and grandchildren.

Very sincerely yours,
J. C. MAXWELL, M.D.
Paw Paw, Michigan

March 13, 1950

March 10, 1950.

Mr. Carl L. Gray, Jr., Administrator,
United States Veterans Administration,
Washington, D. C.

Dear Sir:

At a meeting of the Michigan State Board of Registration in Medicine on October 11, 1949, the policy of the Veterans Administration in permitting veterans to attend foreign medical schools at the expense of the United States Government was presented and discussed at considerable length. The Michigan Board in 1928 adopted a Regulation and Rule, which is a promulgation of the Medical Practice Laws of Michigan, Act 237, Public Acts of 1899, as amended, stating that the Michigan Board will accept applicants who are graduates from only Class A Medical Schools within the continental United States to the Board's examination or licensure by interstate reciprocal indorsement. Therefore, the Board unanimously adopted the following Resolution:

"WHEREAS, It appears that the Veterans Administration is advising veterans that they may attend any foreign medical school at the expense of the United States Government, and,

WHEREAS, Such foreign medical schools are not inspected, classified and approved by an acceptable and

(Continued on Page 598)

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F. H. C. BAUGH, M.D.C.M.
Medical Supt.

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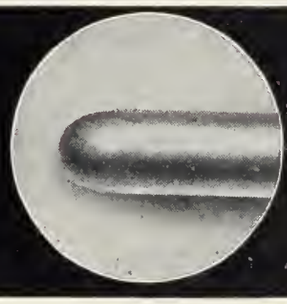

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(Continued from Page 596)

recognized accrediting organization in the United States, and,

WHEREAS, Such graduates of foreign medical schools are not eligible for registration and licensure in the State of Michigan, therefore,

BE IT RESOLVED, That the Michigan State Board of Registration in Medicine deplores the present policy of the Veterans Administration in this respect and urges that their policy be changed, and

BE IT FURTHER RESOLVED, That a copy of this Resolution be sent to the Michigan Veterans Administration, and other interested parties.

Sincerely yours,
MICHIGAN STATE BOARD OF REGISTRATION IN MEDICINE
JEM:s J. EARL MCINTYRE, M.D., *Secretary.*

March 24, 1950.

Mr. W. W. Boyles, Field Representative,
Michigan Medical Service,
Washington Boulevard Building,
Detroit 26, Michigan.

Dear Mr. Boyles:

In answer to your inquiry concerning our interpretation of the Michigan Medical Practice Act on the use of X-Ray films and their use as a diagnostic service, will state that your interpretation as contained in your letter is correct. We have searched our files and cannot find record of having given Mr. Fred J. Picknell, Administrator, or any other officials or doctors of medicine of Monroe Hospital, any interpretation of the Law as your letter states.

For your information and guidance, I am enclosing a marked copy of the Medical Practice Laws of Michigan, defining the practice of medicine. During my past twenty-two years of service on the Michigan State Board of Registration in Medicine, we have had various complaints against the Monroe Hospital, and the most common were charges of doctors of medicine who were not licensed in Michigan associated with or operating in that hospital. Most of them doctors licensed in Ohio, but not in Michigan, but operating in the Monroe Hospital.

You will note that the Medical Practice Act provides that a medical doctor may call in an out-state doctor not licensed in Michigan for consultation, but that does not mean he has any right to perform any medical service to or for the patient. Any citizen or resident of Michigan has the privilege of going to another state for x-ray films and their interpretation, and a doctor in Michigan may use them if he so chooses, but an out-state doctor has no right to come across the border in Michigan to examine the patient and make diagnosis, unless he is registered and licensed to practice medicine in Michigan.

I have referred your letter to L. A. Potter, Investigating and Law Enforcement Officer of the Michigan Department of Health, and the Michigan State Board of Registration in Medicine for his information and guidance. I trust the above satisfactorily answers your questions, and will be of service to you.

Sincerely yours,
J. EARL MCINTYRE, M.D., *Secretary.*
JEM:s

Excerpts from letter from an English housewife.

What a pity that this medical question has taken such a hold on Truman's mind—and I do wish that the rank and file wouldn't think it "something for nothing" because it isn't. Every person in the country is taxed

(Continued on Page 600)

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(Continued from Page 598)

5/- a week—that's about $1.00 in ordinary exchange and the doctor is paid something between 16/- and 18/- a year for each patient. What sort of service is he going to give for that? He does just what you'd expect—as little as possible and often grudgingly at that. I do wish men from the United States wouldn't come here, listen to "officials" and then go back to say that the "scheme is working very well." As a scheme, it is; as a medical system, it's a mess.

The troubles are not apparent to the casual glance, but are very real just the same. The whole thing is dreadful. I was amused the other day when—(husband) broke his glasses and called up the oculist who has looked after him for years. The secretary said, "If it is on the National Service, we haven't an appointment for three months, but Dr. — can see Mr. — tomorrow morning if he is still on the private list." He can't see a line of print without glasses, but that wouldn't have made any difference.

I had a fall last week, tore ligaments in my ankle, and the doctor thought I'd broken the thing and wanted it x-rayed. Though I am still his private patient, he asked me if I'd like it done on the National; if so, the films could be made about six miles away, but could not be read until the *end of the week.* Since it was Monday, I thought it would be better to go to Leicester, fourteen miles, and get a report in the afternoon by telephone.

Like everything else, it is a most dreadful muddle imaginable—with no heart and little interest on the part of the doctors and not a scrap of faith on the part of the patient. We all, private as well as panel, suspect the good will of any doctor who is on the scheme. It is affecting the attitude of nurses. I notice that my doctor hasn't much confidence in any of them. The dangers of it all are so insidious. It is more like the slow change of a fairly good man losing his strength of character by degrees until he is completely without any sense of moral responsibility at all. One can't sentence him to gaol until he has been convicted of a crime, but his friends and neighbors know he is wrong just the same.

I think I'll have to put up a sign, "Don't mention medicine," over my desk, though probably I'd not pay much attention. I feel so very strongly that this is one of the real *evils* of the times that I have to talk about it.

As you know, we are getting excited about the elections. There isn't much hope from the masses who pat their pockets and look with glee at the wasted big houses and shabby estates—even though they know that no pound buys more than it used to—not as much in fact, but it sounds more and those who had private fortunes haven't them any more. They've gotten even with the "rich." Some of the propaganda is piped down hoping that those of the middle classes who voted for them before will do it again, if not too frightened. The Labor Party, promising to nationalize still more, has a strong hold, and it is anybody's guess as to what will

(Continued on Page 602)

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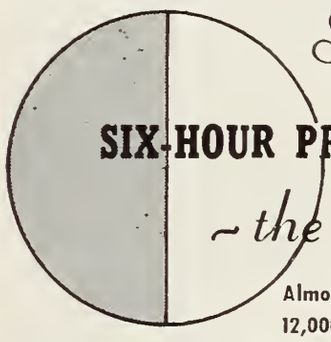

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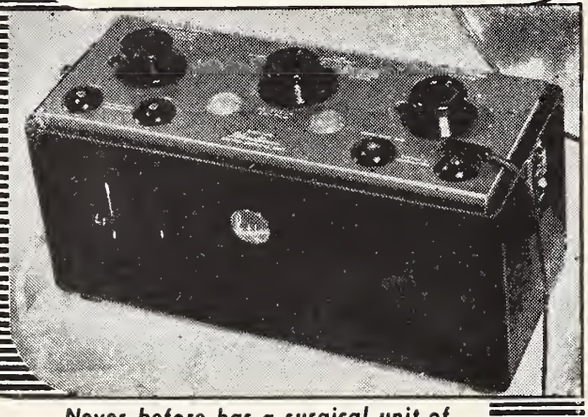

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Woman's Auxiliary

FIRST CALL TO STATE AUXILIARY MEMBERS

The twenty-fourth annual meeting of the Woman's Auxiliary to the Michigan State Medical Society will be held at the Hotel Statler, Detroit, Michigan, September 19, 20, and 21, 1950.

Start making plans now to attend this meeting. Come, help us with our program for next year and have fun with us, too. Visit the hospitality room or the President's suite, where you will meet and visit with old friends and make new ones.

AMA AUXILIARY MEETING

Mrs. Don R. Wright, Flint, President of the Woman's Auxiliary to the Michigan State Medical Society, announces that the twenty-seventh annual meeting of the Woman's Auxiliary to the American Medical Association will be held June 26 to 30, 1950, in the Fairmont Hotel, San Francisco. Mrs. Clifford Long, chairman of the Committee on Arrangements for the national auxiliary meeting, has issued a cordial invitation to all auxiliary members to participate in the social functions and general sessions.

COMMUNICATIONS

(Continued from Page 600)

be the result. Some of the top conservatives are really hopeful, but then so are the village men in the pubs, and there are more of them to make crosses! And if we do win, how this dreadful mess can ever get straightened out I can't imagine. Sometimes, I almost wish that Mr. Marshall hadn't made a loan at all and England who is always so fine with her back to the wall, but far too easy going any other time, would have had to fight. Sometimes, I think she'd have done it, though the Labor Party wouldn't have stayed in office very long.

Why will people who won't allow any one but an expert to touch their car or radio fail to heed the advice of highly trained professional men and trust their very lives to anyone regardless of training or education who promises them hope?—MSMS Cancer Committee.

The Society for Investigative Dermatology

will hold its

Eleventh Annual Meeting

at the Clift Hotel, San Francisco, California, on Sunday June 25, 1950

(See Archives of Dermatology and Syphilology, May, 1950, for Scientific Program).

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. . . . . NEWS MEDICAL

Michigan Authors

Russell N. De Jong, M.D., Department of Neurology University of Michigan Medical School, wrote the "Foreward," in *The Journal-Lancet,* Neurology Issue, March, 1950.

Henry F. Vaughn, Dr. P. H., of Ann Arbor, published an article, "Air Pollution Institute: Introduction," in *Industrial Medicine and Surgery,* March, 1950.

Carey P. McCord, M.D., of Detroit, published an article, "The Physiologic Aspects of Atmospheric Pollution," in *Industrial Medicine and Surgery,* March, 1950.

C. J. Velz, M. D., of Ann Arbor, published an article, "Pollens: Sampling and Control," in *Industrial Medicine and Surgery,* March, 1950.

Meyer O. Cantor, M.D., of Detroit, published an article, "Effect of Variations in the Amount of Mercury on the Speed of Intestinal Intubation," in the *Archives of Surgery,* April, 1950.

* * *

Blue Shield of California.—The California Physicians Service on February 1, 1950 announced the broadening of its coverage to include twenty-three of the most dreaded and generally most expensive afflictions. For an additional charge members of the CPS will be able to receive extended treatment for cancer, tuberculosis, diabetes, polio, pernicious anemia, and nearly a score of other listed ailments. The new "catastropic coverage" provides two years, or $5,000 worth, of medical surgical and technical services for these twenty-three ailments. The cost for a family of three or more will be $1.95 a month. Hospitalization is not included under the terms of this CPA contract, but is available under the basis CPS contracts. This plan is sold only in groups and in the northern districts of California.

* * *

Veterans Administration.—The endless stream of human problems which Veterans Administration helps to solve every year is reflected in the 15,500,000 personal interviews that VA employes conducted with veterans, their dependents or beneficiaries during the last fiscal year. The problems involved benefits administered by VA under laws enacted by the Congress. . . . It provided medical care and hospitalization for a daily average of 107,000 veteran-patients in VA and non-VA hospitals. It furnished nearly 5,000,000 outpatients medical treatments and over 763,000 outpatient dental treatments. At the end of the fiscal year, 2,313,545 veterans were receiving disability compensation, pension or Army retirement pay from VA. In addition, 960,000 dependents of deceased veterans were drawing death compensation or pension payments.

Bon Secours Hospital—

The third annual clinic day of Bon Secours Hospital, Detroit, will be held Tuesday, June 6, 1950. The program will include the following presentations:

Morning Session—9:00 a.m.
JAMES BLAIN, M.D., *Chairman*

Preoperative and Postoperative Diabetic Care
T. H. Heenan, M.D.
Hemochromatosis .....R. J. Reichling, M.D.
Cardiac Emergencies .....Hugh Stalker, M.D.
Significance of Isolated Pulmonary Lesions
George Belanger, M.D.
Bleeding Peptic Ulcer .....R. L. Fisher, M.D.
Management of the Irritable Colon R. C. Connelly, M.D.

Intermission—10:30 a.m.

Morning Session (Continued)—10:45 a.m.
HUGH STALKER, M.D., *Chairman*

Lower Nephron Nephrosis .....William Flora, M.D.
Modern Trends in Surgery of the Colon
D. Sweeny, Jr., M.D.
Multiple Primary Malignancies Involving the Colon
J. F. Wenzel, M.D.
Indications for Cholecystotomy; New Technique
James Blain, M.D.
Management of Prolonged Labor ....R. C. Swanson, M.D.
Congenital Absence of Vagina; Case Report
G. B. Ohmart, M.D.

Evening Session—8:00 p.m.
DONALD ROSS, M.D., *Chairman*

Hyperthyroidism in Children .....I. G. Downer, M.D.
Menstrual Toxins .....J. A. Kasper, M.D.
Ocular Fundi Observed in Premature Infants
C. W. Lemard, M.D.
Surgical Treatment of Cancer of Nose and
Paransal Sinuses .....B. Proctor, M.D.
Significant Lesions of the Oral Cavity
G. R. Maitland, M.D.
Comments Regarding the Etiology of
Bronchial Asthma .....L. H. Bartemeier, M.D.

* * *

Antihistamine for Colds.—The Federal Trade Commission made public on March 24, 1950 its complaint against advertising claims for Kriptin, sold by Whitehall Pharmacal Co. Three days earlier it placed similar charges against Resistabs (Bristol-Myers) and Anahist (Anahist Co. Inc.). Hearings are scheduled for April 28. Food and Drug Administration does not consider the action to be in conflict with its grant of permits for manufacture of the products and their sale under proper and precautionary labeling. (More than 100 different-named proprietaries in this antihistamine, anticold line have been granted FDA permits). Its antibiotics division, meantime, is preparing to terminate certification of penicillin-G batches April 1 and speculating on what the

(Continued on Page 606)

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(Continued from Page 604)

medical profession's response will be to terramycin, which goes on the market for first time this week—first antibiotic to receive FDA approval for general use since aureomycin and chloramphenicol were released about a year and a half ago. Note: FDA is happy over Federal appellate court decision in New Orleans upholding conviction of seller of an abortifacient drug and closely following progress of current Chicago trial involving a "health tube" device.—WRMS, March 27, 1950.

* * *

Hoover Chief Advisor to Health Information Foundation.—Washington observers noted with interest the appointment of Herbert Hoover as chairman of the citizens' advisory committee to Health Information Foundation. His association with this newly formed organization, in the light of his espousal of numerous governmental administrative reforms now under consideration on Capitol Hill, may well have long-range results bearing significantly on the Federal government's whole medical establishment. Incidentally, House hearings on a United Medical Administration—advocated by Hoover Commission—are now scheduled to open on Wednesday, having been postponed one week. Note: Federal Security Administrator Oscar R. Ewing is not permitting rumors that he seeks New York's governorship curtail his campaign of speechmaking in support of compulsory health insurance.—WRMS, March 27, 1950.

* * *

New Directory Shows One Doctor for Every 750 Persons in U. S.—The United States at the beginning of 1950 had one doctor for every 750 persons. This is the best showing for any nation in the world, with the exception of Palestine where a temporarily high ratio exists because of an influx of refugee doctors.

Next to the United States, the largest supply of doctors in relation to population exists in Great Britain where, based on latest available official figures, there was one doctor for 870 persons. Other countries in order are: Iceland, 890; Denmark, 950; Canada and New Zealand, 970. Other nations range from 1,100 persons per doctor to 25,000 persons per doctor, a situation which exists in China.

The ratio for this country was revealed by Dr. George F. Lull, Chicago, secretary and general manager of the American Medical Association. It was based on an estimated national population of 151,000,000 and 201,278 doctors whose names will be continued in the eighteenth edition of the *American Medical Directory,* to be issued about June 1.

"This is the largest physician population in the history of the country," Dr. Lull said. "The previous directory, published in 1942, showed 180,496 names for the United States. The increase is due principally to the graduation of new doctors by medical schools.

"The directory will contain 47,399 names for the first time. These additions were partially offset by 26,617 deletions for deaths or other causes.

"In 1930, there was an estimated 154,500 doctors for a population of 122,775,000, or one doctor for every 795 persons.

The new directory will contain 2,913 pages, or 112 more than the previous record volume issued in 1942. It will list the names, year of birth, medical school and year of graduation, specialty, if any, and addresses of physicians in Canada and the United States dependencies, as well as of those in the United States.

The total listing will be 219,678 physicians. The 1942 directory contained 201,272 names, including 4,209 doctors in the Philippines. The Philippines are no longer a dependency of the United States and have been dropped from the new directory.

"On the basis of the new schools that are being organized and the expansion of existing schools that is now under way, the freshman class in the medical schools of the United States will shortly exceed 7,000 students, an all time high," he pointed out. "The average size of the freshman class in the 10 years preceding the war was 6,016."

* * *

Fewer VA Beds for Non-service-connected Cases.—Closing of five military General Hospitals by June 30, as scheduled, will mean still fewer beds available in VA hospitals for veterans with non-service connected ailments. At present, VA has 1,800 patients in the hospitals scheduled to be shut down. It is expected that a high percentage of these will have been released by June 30. The remainder will be absorbed in VA's own hospitals, whether service or non-service cases. In anticipation of this, VA will withhold beds that might otherwise be used for non-service cases. This is the second development within a week pointing toward less care available for non-service patients. Earlier VA said that it would have fewer beds available for these cases as a result of a personnel reduction in its medical and hospital departments.

* * *

Senator Hunt (D.-Wyo.) made a speech on the Senate floor January 30, the day his National Health Insurance bill, S.2940, was introduced. He pointed out that only those families whose gross income totaled less than $5,000 would be eligible under his bill to apply for coverage. He stated *that 79% of all the families of the United States are in the $5,000, or lower, income bracket.* S.2940 is silent on how or if medical fees would be set, and no reference was made in his speech addressed to this point.

* * *

Representative Martin (R.-Mass.) submitted figures to the House Ways and Means Committee relating to Federal expenditures for grants-in-aid to the states, showing that in 1946 the total was $645,000,000 and by 1948 had reached $1,418,000,000. Included in the total were the following items in which the medical profession might be interested: Public Health, $39,252,000; maternal and child health and welfare, $21,409,000; old-age assistance, $573,304,000; aid to dependent children, $141,738,000; and aid to the blind, $16,947,000.

* * *

Major General R. W. Bliss, Army Surgeon General, has selected twenty-six civilian and three Army physicians to participate in an Overseas Consultant Program including seminars and clinics for overseas physicians,

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* * *

Townsend Plan.—Advocates of the Townsend Plan for National Insurance occupied the attention of the Finance Committee for two days in February. In addition to Dr. Townsend, his son, and the statistician of the plan, Senators Sheridan Downey and Claude Pepper, who sponsored S.2181, embodying the Townsend Plan, testified. They protested that H.R.6000 does not provide adequate support for the aged. Mr. Townsend, Jr., pointed out that the aged would be allowed as little as 85 cents a day which would not even pay for their food. Under their plan, it is proposed that all persons sixty years of age or over who have retired, the totally blind, the totally and permanently disabled, and widows with dependent children under eighteen would be covered with a pension of $150 per month, this pension to be produced at the start by a tax of 3% on the gross income of persons and companies with certain exemptions.

"A Century of Medical Education at the University of Michigan"—the feature article in this number (Page 579) was prepared by A. C. Furstenberg, M.D., Dean of the University of Michigan Medical School, in collaboration with Joseph H. Fee, Science Reporter of the University of Michigan. The Editor expresses his appreciation for this interesting and informative delineation of the University of Michigan's progress in medical education during the past century.

J. Norris Asline, M.D., Bay City, **James E. Cole, M.D.**, Highland Park, and **Leonard M. Gaydos, M.D.**, Detroit, represented the Michigan State Medical Society at the course in "The Medical Aspects of Atomic Warfare" held at Western Reserve University Medical School, Cleveland, the week of April 3. The school was sponsored jointly by Western Reserve and by the United States National Security Resources Board of which John Steelman is Director.

* * *

James A. Waggener, Public Relations Director of the Indiana State Medical Association, Indianapolis, was a visitor at the MSMS office Friday, March 16. During his visit he observed the organizational and public relations activity of our State Society.

* * *

Special AMA Train.—Chicago to San Francisco.—The Illinois State Medical Society is sponsoring a special train to San Francisco for the AMA annual session in June and has invited all members of the Michigan State Medical Society to join with the Illinois doctors in making the trip west in a pleasant and happy manner. For details, write Secretary Harold M. Camp, M.D., Illinois State Medical Society, Monmouth, Illinois.

Say you saw it in the Journal of the Michigan State Medical Society

The American College of Chest Physicians will hold its 16th annual meeting at the St. Francis Hotel, San Francisco, June 20 through 25, 1950. For program, write the College at 500 N. Dearborn Street, Chicago 10, Illinois.

C. J. Golinvaux, M.D., of Monroe is President of the Michigan Chapter.

* * *

A Chicago restaurateur, Joseph Christensen, writes the following: "I cannot put M.D. after my name but I can, at least for a while, still put U.S.A. As a consequence, please accept the enclosed check for $25 as a slight token of regard for my doctor and all his colleagues. These are my 'dues' as a citizen, and I hope they will help in your fight against socialized medicine. A people without guts are soon a nation without guts, and if it should become necessary to remove any part of mine, I want to pick my man and pay his charge without a precinct captain getting his nose in my anatomy."

* * *

The University of Illinois College of Medicine, Chicago, announces a course in Endocrinology, May 15 to 20, 1950, under the direction of Willard O. Thompson, M.D., Chicago. Maximum registration will be 100. Fee for ACP members is $30; for non-members, $60.

For information, write Dr. Thompson at 700 North Michigan Avenue, Chicago 11, Illinois.

* * *

Alexander W. Blain, M.D., of Detroit, was especially honored on his sixty-fifth birthday. The bulletin of the Alexander W. Blain Hospital was dedicated to its founder in Detroit, March 4. Fifteen scientific papers were contributed by students who had a portion of their surgical training under his guidance. Other contributors were Dr. Frederick A. Coller of the University of Michigan, Ann Arbor, President of the American College of Surgeons, and Dr. John R. Boland, associate physician at the Blain Clinic since 1911.

* * *

Veterans Administration announced on March 3 that it had reduced its personnel force by approximately 7,800 jobs. The reduction will be nation-wide and will include all activities of the VA with 3,000 employes in hospitals and homes and 4,000 in other activities included.

* * *

Immunization Publicity.—The St. Clair County Medical Society members and health director, C. C. Benjamin, M.D., recently co-operated in a newspaper publicity campaign to interest parents in necessary immunization procedures of their children.

The following pithy news items appeared in one daily and seven weekly newspapers in St. Clair County: "All babies born in November, 1949, should be taken to their family physician to be immunized against whooping cough," and "Children born in 1947 should be taken to their family dentist for an oral examination."

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* * *

"Pulmonary Edema as Related to Anesthesia" is the title of a Discussion Conference to be held by the an-

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Esophageal Surgery, one week, starting June 5.
Breast and Thyroid Surgery, one week starting June 26.
Thoracic Surgery, one week, starting June 12.
Gallbladder Surgery, ten hours, starting June 19.
Fractures and Traumatic Surgery, two weeks, starting June 12.
Basic Principles in General Surgery, two weeks, starting September 11.
GYNECOLOGY—Intensive Course, two weeks, starting June 19, September 25.
Vaginal Approach to Pelvic Surgery, one week, starting May 15.
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Personal Course in Diagnosis and Treatment of Congenital Malformations of the Heart, two weeks, starting June 5.
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esthetists of Michigan in Suite 500 of the Book-Cadillac Hotel, Detroit, on Friday, September 22, at 12:00 noon, on the occasion of the MSMS Annual Session.

Harry C. Kurtz, M.D., of Detroit will be discussion leader.

For luncheon reservation, contact H. J. Van Belois, M.D., 522 Medical Arts Building, Grand Rapids 2, Michigan.

* * *

The American Medical Golfing Association's Thirty-fourth Tournament will be held at the Olympic Club of Lakeside, San Francisco, on Monday, June 26, 1950, the opening day of the AMA Annual Session. One hundred twenty-five trophies and prizes will be placed in competition in ten events, featuring gross and net scores in both 36- and 18-hole competition. Luncheon and banquet at Olympic Club. For entry blank, write Bill Burns, Secretary, 2014 Olds Tower, Lansing 8.

* * *

The Upper Peninsula Medical Society's Fifty-second Annual Meeting at Houghton on June 23-24, 1950, will feature an excellent scientific program. Among the outstanding speakers are: Francis D. Murphy, M.D., Milwaukee; Harold Walder, M.D., Duluth; E. D. Spalding, M.D., Detroit; John E. Faber, M.D., Rochester; LeMoyne Snyder, M.D., Lansing; James L. Wilson, M.D., Ann Arbor; Arnold Jackson, M.D., Madison; Lawrence Reynolds, M.D., Detroit; Vernon L. Hart, M.D., Minneapolis; Howard H. Cummings, M.D., Ann Arbor; W. J. Troop, M.D., Green Bay, and Joseph C. Gemeroy, M.D., Detroit.

At the Friday, June 23, luncheon, two prominent speakers will present several socio-economic matters of importance to the medical profession.

Paul D. Bagwell, Lansing, Professor of Speech at Michigan State College, will address a public meeting, Friday evening, June 23.

All MSMS members are cordially invited to the Upper Peninsula Medical Society meeting. Make hotel reservations through R. E. Hillmer, M.D., Painesdale, Michigan.

Pulmonary Tuberculosis—22.8 per cent

Of 14,591 handicapped persons in Michigan who benefited from rehabilitation services in 1948-49, 68.7 per cent had a disease disability. About one-third of these—22.8 per cent—were incapacitated by tuberculosis. In addition, tuberculosis constituted almost one-fourth of all disabilities served during this period. *In terms of a single disease, and in terms also of any single disability, tuberculosis was the highest.*

Michigan Tuberculosis Association

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Acknowledgment of all books received will be made in this column, and this will be deemed by us as a full compensation to those sending them. A selection will be made for review, as expedient.

MITCHELL-NELSON'S TEXTBOOK OF PEDIATRICS. Edited by Waldo E. Nelson, M.D., Professor of Pediatrics, Temple University School of Medicine; Medical Director of Saint Christopher's Hospital for Children. With the Collaboration of Sixty-Three Contributors. Fifth edition. 426 illustrations; 19 in color. Philadelphia: W. B. Saunders Co., 1950. Price, $12.50.

The latest printing of this standard text appears with some 300 additional pages added to the 1,352 of the previous edition. It makes a bulky volume. One well understands the statement in the Preface: "The problem of encompassing the various aspects of child care in a single volume is becoming an increasingly difficult one." Nothwithstanding the difficulty, however, the task has been well done, and the present text is as complete and up-to-date as any we have seen.

The following sections are new or are completely rewritten: Growth and Development, Congenital Malformations, Inborn Errors of Metabolism, Anaesthesia for Children, Immunity and Allergy, Streptococcal Infections, The Use of the Viral Diagnostic Laboratory, Histoplasmosis, Congenital Heart Disease, Mental Deficiency, and Burns. Other sections have been completely revised.

It is particularly noteworthy that all sections contain material so new that it is hardly in the Journals. As an illustration, it is our impression that the rather dramatic results from the use of female donors in the treatment of Erythroblastosis was first publicly presented by Diamond in San Francisco in November, 1949, yet it is included in the section on The Blood in this book published in January, 1950. There are many other examples of the inclusion of brand new material.

This volume has always been a desirable addition to the library of the practicing physician. It is rapidly becoming a "must."

H.F.B.

INTESTINAL INTUBATION. By Meyer O. Cantor, M.S., M.D., F.A.C.S., Assistant Attending Surgeon Grace Hospital, Formerly Senior Attending Physician Deaconess Hospital Detroit, Michigan. Springfield, Illinois: Charles C. Thomas, 1950. Price, $7.50.

This, the first book of its kind, answers most of the problems which confront all of us who use the long tube to prepare a patient for operation, use it for treatment, or use intestinal intubation postoperatively routinely. An amazing list of 237 references covers everything that has ever been written in the field of intubation, there are many case histories to illustrate all types of intestinal obstruction, and all of the uses of the long tube that one can imagine. The x-ray plates accompanying case histories are excellent. Over 500 case histories are presented in the 279 pages, the author's cases, and more than 95 per cent were intubated successfully without fluoroscopic control.

The history and development of duodenal tubes, and later the long tube is dealt with completely, the anatomy of the gastrointestinal tract which requires study in the successful passage of the long tubes, and the physiology of intestinal obstruction and the changes accompanying long periods of intubation. Techniques of passing the

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various types of tubes are described well, along with measures which are most helpful in overcoming obstacles. The Cantor tube technique is discussed in detail.

There are excellent chapters on small bowel disorders, atony, paralytic ileus, and other conditions for which the long tube is needed. The large holes in the Cantor tube seem most advantageous in the presence of paralytic ileus, and again when it is desired to give small amounts of barium orally to outline a point of obstruction. The most brilliant results with the Cantor tube are found in the obstructions resulting from peritonitis, the latter forming a very high percentage of clinical cases requiring intubation. Other conditions discussed include band obstruction, strangulated hernia, mesenteric thrombosis, intussusception, etc. Long tube intubation as used in large bowel obstructions, and in the treatment of diseases of the colon is also thoroughly discussed, with a timely chapter on the errors and safeguards of intubation. The reader is warned of the danger of waiting too long after decompression, lulled by the comfort of the patient whose obstructive symptoms are relieved, before undertaking corrective treatment.

Other topics well handled are the nursing care of the intubated patient, the responsibility of the surgeon in the use of the long tube, the role of the roentgenologist, and a chapter on experiments carried out by the author to demonstrate the effect of intestinal gases on the balloons used with long tubes. All in all, the topic has been handled very completely, and this book would make a most useful addition to your medical or surgical library.—S.R.W.

QUESTIONS MEDICAL STATE BOARD AND ANSWERS. By R. Max Goepp, M.D., Formerly Professor of Clinical Medicine, Graduate School of the University of Pennsylvania, and Professor of Medicine, Woman's Medical College of Pennsylvania; and Harrison F. Flippin, M.D., Associate Professor of Medicine at the Graduate School of the University of Pennsylvania. New, 8th Edition. 663 pages. Philadelphia & London: W. B. Saunders Company, 1950. Price, $7.00.

The first edition of this volume appeared in 1909. It is now eleven years since the last revision, and the changes in medical science have been profound. Hence, much of the book has been revised and rewritten completely. The book contains almost six hundred pages of actual questions asked on State Board examinations, and the correct and accepted answer. The index is extensive, and the book will serve most valuably for students who anticipate taking such examinations.

THE PHYSIOLOGY OF THOUGHT. A functional study of the human mind in action. By Harold Bailey, M.D., F.A.C.S. New York: The William-Frederick Press, 1949. Price, $3.75.

The text appears to be mainly a presentation of the author's own views and ideas. The book is written in a style that might appeal to laymen, but yet his ideas are cloaked with neuro-anatomical terminology that would be difficult to follow without technical knowledge. This subject is always interesting, and the author has taken

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great liberties with it, viz.: He only mentions briefly the sense centers in the brain and he appears to group all the psychoneuroses under the heading of neurasthenia. He believes that thought is a function of nerve cells. Consciousness results from stimulation of the sense organs. Impressions received through the sense organs plus thought results in memory. Memory is not a space-occupying change in the brain but the product of physiological function of the brain cells. Instincts are inherited memories. Latent memories manifest by certain talents are also inherited. Memories are active during sleep, but there is no memory after death. He mentions four or five states of consciousness. Rapid and intense thinking accompanies emotional expression. The brain cells fatigue like any other cells of the body and then neurasthenia is the result. Hallucinations result from an impairment of thought function, be the course what it may. Memory becomes defective, emotions are no longer under control, sense impressions wrongly interpreted. Concentration is weakened and judgment is unreliable.

The book is interesting and can be read hurriedly. It is not a textbook, and only the reader can determine its value to him.

G.K.S.

DISEASES OF THE FOOT. By Emil D. W. Hauser, M.S., M.D., Associate Professor of Bone and Joint Surgery, Northwestern University Medical School; Attending Orthopedic Surgeon, Passavant Memorial Hospital, Chicago. Second edition. Illustrated. Philadelphia: W. B. Saunders Co., 1950. Price, $7.00.

Hauser has given the medical profession an excellent treatise on the foot in his second edition of "Diseases of the Foot." The fundamental concepts of functional treatment are clearly outlined, and the chapters remain unchanged from the first edition. Also, the treatment of congenital deformities and orthopedic conditions are dealt with in the manner so adequately described in the previous edition. A great deal of new material has been added on circulatory disturbances, and all of the various entities are thoroughly discussed as to etiology symptoms and treatment, and the uses of antibiotics and anticoagulants in foot conditions has been added to this volume. Fractures and dislocations are discussed in a limited manner only, inasmuch as the author concerns himself primarily with diseases. The chapter on bone tumors seems somewhat inadequate.

On the whole, this is a very useful and valuable book for all who are confronted with "foot problems."

P.C.K.

THE CYTOLOGIC DIAGNOSIS OF CANCER. By the Staff of the Vincent Memorial Laboratory of The Vincent Memorial Hospital, A Gynecologic Service Affiliated with the Massacsusetts General Hospital, Boston, Massachusetts. The Department of Gynecology Harvard Medical School. Published under the sponsorship of the American Cancer Society. Philadelphia: W. B. Saunders Co., 1950. Price, $6.50.

This book is beautifully and excellently illustrated. The pictures and comment on cytological alterations due to radiation are particularly good and the illustrations of neoplastic and normal cellular elements in the urinary, gastric and pulmonary secretions are unique and have not appeared previously in book form. The material on pleural and peritoneal fluids is good but could have been expanded. The oncological correlation, as far as the pathologist is concerned, is weak. The frailties attendant with this type of cytological diagnosis of cancer are delicately soft pedaled, and a review of its merits compared to biopsy is so controversial that it probably should be ignored both in this review and in the book.

This book is highly recommended, but the reader should peruse the preface prior to reading the text, and also reflect on the fact that without the sponsorship of the American Cancer Society this excellent work would not be available at such a reasonable price.

A.A.H.

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VOLUME 49 JUNE, 1950 NUMBER 6

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THE FIGHT FOR FREEDOM— STATE LEVEL—NATIONAL LEVEL

The work to keep American Medicine free of compulsion is being carried out with increasing vigor on the local, state and national levels. The individual doctor and the county medical society are on the firing line, aided by two distinct programs assumed by the state and national medical organizations.

State Level

The far-reaching program of the Michigan State Medical Society is supporting the practitioner and his county society through:

The CAP Plan:

The "Good Citizenship Campaign";

The "Tell Me, Doctor" radio program beamed daily over 26 stations;

The informative films "Lucky Junior" and "To Your Health" shown in 400 theaters;

Newspaper releases and pamphlets;

Speeches through the active Speakers Bureaus;

Community-medical service projects, such as Michigan Health Council, Rural Health Conferences, et cetera.

Because of this aggressive educational program, the people are learning of the leadership of Michigan's medical profession in promoting better health under the present *voluntary* system. That's what every member's tangible contribution (MSMS assessment) is accomplishing on the state level.

National Level

Covering the forty-eight states, the American Medical Association National Education Campaign plays its part through important contacts in the United States and abroad, working with national leaders and associations, preparing information and distributing millions of vital pamphlets offering sound advice and guidance. This top-level activity stems from the dues a member pays to the AMA.

Each of these two separate programs has a necessary role to play in its own sphere. Both—well integrated—are helping to keep us free of Compulsion.

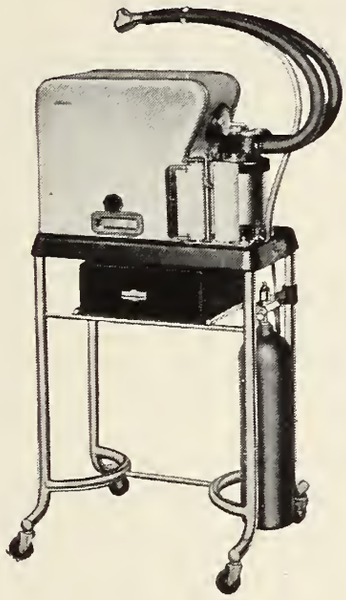
HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of April 19, 1950

- Monthly financial reports, including the Public Education Account and Public Education Reserve Account, were presented, studied and approved.

  Bills payable for the current month were presented, studied, and ordered paid.
- E. S. Parmenter, M.D., Alpena, was appointed by President W. E. Barstow, M.D., to the MSMS Committee on Venereal Disease Control; W. B. Harm, M.D., Detroit, was appointed by Council Chairman O. O. Beck, M.D. as chairman of the MSMS representatives to the Liaison Committee with the Michigan State Board of Registration in Medicine. Both of these appointments were confirmed by the Executive Committee.
- A Committee to Study the Use and Misuse of Atomic Power (a committee of The Council) was authorized.
- Joseph A. Witter, M.D., Detroit, Chairman of the Wayne County Medical Society's Speakers Bureau, was congratulated for an excellent job in organizing and activating this Bureau.
- The Michigan Health Council was congratulated on its recent work and efforts, and recommendation was made that the Health Council expedite the printing and distribution of its Handbook (directory of health services in Michigan).
- The Executive Committee of The Council acted as hosts at luncheon to members of the Executive Committee of the State Bar of Michigan.
- Report was given that Drug Topics, a national magazine in the hospital field, recently had dedicated a full-page in color to the MSMS "hourglass" campaign. This illustration is to be reprinted in JMSMS. John E. Manning, M.D., Saginaw, was given credit for his idea of using the 3-minute hour glass in the Michigan CAP program.
- Centenary of University of Michigan Medical School. The Editor reported that the May Jour-

(Continued on Page 628)



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HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

(Continued from Page 626)

nal, including the cover, will be devoted to the U. of M. Medical School Centenary. Further celebration will take place at the MSMS Annual Session in Detroit next September.

- A Committee on rehabilitation of handicapped children, advisory to the State Department of Public Instruction, was authorized. The personnel, appointed by Chairman Beck, was: Frank Van Schoick, M.D., Jackson, Chairman, O. D. Stryker, M.D., Mt. Clemens, L. A. Drolett, M.D., Lansing, Arch Walls, M.D., Detroit, and J. M. Dorsey, M.D., Detroit.
- The Michigan Heart Association was given a vote of thanks for its continued generous support of the Michigan Rheumatic Fever Control Program; its contribution of $23,246 was ordered placed in the Rheumatic Fever Control Fund, to help defray the expenses of the 28 Rheumatic Fever Centers in Michigan.
- W. L. Brosius, M.D., Detroit, was thanked for his generosity in contributing the Sykes Lecture honorarium to the Michigan State Medical Society.
- Speakers on the Assembly and Section program at the MSMS 1950 Annual Session, scheduled for the Book-Cadillac Hotel, Detroit, September 20-21-22, were announced.
- Jerome W. Conn, M.D., Ann Arbor, A. M. Rothman, M.D., East Detroit, and Alice F. Campbell, M.D., Albion, were appointed to the Committee on Arrangements and Program for the 1951 Michigan Postgraduate Clinical Institute. These appointments were confirmed by the Executive Committee.
- Reports: on AMA Rural Health Conference of February 4, by R. J. Hubbell, M.D., Kalamazoo; on the Conference on Basic Conservation Education of March 8, by K. H. Johnson, M.D., Lansing; on the Tenth Annual Congress of Industrial Health of February 20-21, by Max R. Burnell, M.D., Detroit; and on the Course in "Medical Aspects of Atomic Warfare," week of April 3, by L. W. Gaydos, M.D., Detroit. All these reports were accepted, with thanks to the authors.
- Cost of collecting AMA dues. The offer of the AMA to pay State Societies not to exceed ten cents per member as accounting expense in collecting 1950 AMA dues was considered; the Executive Committee decided to receive this sum from the AMA and to remit it to each county medical society on the basis of the number of AMA dues payments received.
- The American Academy of General Practice of Wayne County's letter of thanks concerning its participation in the 1950 Michigan Postgraduate Clinical Institute was read and ordered placed on file, with thanks.
- Michigan Hospital Service: progress report was presented by President E. D. Barnett, M.D., Detroit.
- Michigan Medical Service: progress report was presented by President R. L. Novy, M.D., Detroit.
- An item in the Secretary's letter was authorized: urging members, if not already paid to send an early remittance for their 1950 MSMS dues, to aid MSMS in its important work and to insure that each member's name appears in the Roster Number of JMSMS (July), was authorized.
- The monthly reports of the President, the President Elect, the Secretary, and the Legal Counsel, were presented and approved.
- The Michigan Attorney General's opinion covering Grand View Hospital in Ironwood (Gogebic County), re limitation on regulations concerning staff membership, was read. This opinion is based on the County Hospital Act and is not to be confused with the judicial ruling in the October, 1937, Genesee County Circuit Court case which applies to city hospitals.
- Procedure for local Mediation Committees. A copy of this suggested procedure, drafted by the MSMS Legal Counsel, was approved and ordered submitted to each County and District Medical Society for use by its local mediation committee.
- Legal and ethical implications arising from disclosure of professional information by a physician. This opinion, presented by Mr. Herbert, was ordered published in JMSMS, for the information of the membership.
- Committee reports presented: (a) Advisory Committee to Michigan Department of Public Instruction, meeting of March 15; (b) Committee on Health Plans Study, meeting of March 19.
- Monthly reports of Rheumatic Fever Control

(Continued on Page 630)

whether the sneeze is seasonal or perennial

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Bibliography: 1. Loveless, M. H., and Dworin, M.: J. Am. M. Women's A. *4*:105, 1949. 2. Schiller, I. W., and Lowell, F. C.: New England J. Med. *240*:215, 1949.

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HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

(Continued from Page 628)

Coordinator Leon DeVel, M.D., were presented and approved.

- The Public Relations Counsel's progress report was presented: (a) eight press-radio-medical society meetings had been held in Bay City, Midland, Traverse City, Grand Rapids, Kalamazoo, Battle Creek, Flint, and Detroit, with an average attendance of over 50; (b) The MSMS Health Care Quiz pamphlet and idea will be used at the AMA "grass roots" meeting in June, 1950, San Francisco; (c) A National Conference on State and Community Health Leadership sponsored jointly by the American Medical Association and the Michigan State Medical Society, will be held in Detroit in October, 1950; (d) A CAP Booster Session was authorized for Lansing on Sunday, May 7; (e) Brookings Institution: Michigan has been selected as one of four states in which an Industrial Medical Care Survey (as part of a national survey on the availability of medical care) will be made by the Brookings Institution through the Michigan Health Council; (f) "To Your Health": The Medical Society of the State of North Carolina has requested permission to have rights of exhibition of this MSMS movie for the State of North Carolina, which permission was granted; (g) Parade Magazine: The April 23 issue of Parade Magazine (eleven million circulation) featured as its main article a story to the effect that the Michigan State Medical Society has the answer to socialized medicine.
- The Executive Director reported on the vital need for more exhibit space in Detroit at Annual Sessions of the Michigan State Medical Society, in order to accommodate many additional firms which desire space.

ARMY CIVILIAN INTERN PROGRAM

A number of positions are still available in the Army Medical Department's civilian intern program, according to an announcement from the Army Medical Department.

Applications are continuing to come in and selections are being made weekly. Interested individuals should submit their applications as soon as possible to insure that their cases will receive consideration.

The recent adoption of uniform service standards for medical interns in the Armed Forces makes no change in the Army program. Service standards are:

1. Army internship served in a military hospital; one year of further active duty in addition to each year of internship.
2. Army internship served in a civilian hospital; two years of further active duty in addition to one year of internship.

To be eligible for this year's program, a candidate must be a potential graduate who will begin an internship during 1950, and must have been accepted for internship training in a civilian hospital acceptable to the Surgeon General.

Individuals who previously submitted applications for internship in an Army hospital and who were not tendered appointments may apply for the civilian program simply by completing two short forms. A new physical examination will not be required at this time.

New applicants must file the complete set of forms, which may be obtained at any medical ROTC office or directly from the Surgeon General of the Army.

Army interns in civilian hospitals must satisfactorily complete eight months of internship to become eligible to participate in the professional examinations leading to appointment in the Regular Army.

FEDERAL INCOME TAX LAWS UNFAIR TO PROFESSIONS, SAYS ECONOMIST

Present federal income tax laws discriminate against physicians and other professional men and women, Frank G. Dickinson, Ph.D., Chicago, economist and statistician of the American Medical Association, points out.

Because a considerable portion of physicians' lifetime earnings are "bunched" into a relatively few peak earning years, they pay more income taxes than other persons who receive the same lifetime incomes spread more evenly over a greater number of years, Dr. Dickinson says in an article in the current (April 29) *Journal of the A.M.A.*

This discrimination in lesser degree applies to a number of other professions, according to the article.

"A physician undergoes a long training period (the longest among the professions) during which he foregoes income and incurs expenses accumulating to approximately $35,000 at the time of entering medical practice, at approximately age twenty-eight," Dr. Dickinson says. "The working lifetime remaining after this prolonged training period is shortened.

"To pay off this investment in training in annual installments, his annual gross earnings would have to be at least $5,000 more than those of a person whose earning period started at age eighteen.

"Under the 1942 Federal Internal Revenue Code, funds used by companies for the purpose of providing employes with pensions or shares in profit-sharing trusts are deductible from gross receipts as business expenses and thus are not a taxable part of the employer's or company's income, if the particular plan is approved by the Bureau of Internal Revenue.

"Since the provisions are restricted to employes, professional men who can qualify as employes—for example, company lawyers and company physicians—can receive the benefits of these pensions and profit-sharing trusts, while those who conduct their professions as single

(Continued on Page 728)

AN ADVANCE IN ANTIBACTERIAL THERAPY

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THE MANIFOLD, SERIOUS SEQUELAE OF OTITIS MEDIA...

especially in infancy, ranging from permanent deafness to suppurative dislocation of the hip, make it imperative to institute prompt treatment of otitis with a rapidly acting, powerful antibacterial agent. Furacin Anhydrous Ear Solution has often demonstrated its effectiveness when other medicaments have failed.* Its wide antibacterial spectrum encompasses the majority of pathogens concerned; it is effective in the presence of pus.

Furacin® brand of nitrofurazone N.N.R. is available in 0.2 per cent concentration in water-miscible vehicles. It is indicated for topical application *in the prophylaxis or treatment of surface infections* of wounds, severe burns, cutaneous ulcers, pyodermas, skin grafts and bacterial otitis. *Literature on request.*

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*Douglass, C.: *The Use of Furacin in the Treatment of Aural Infections*, Laryngoscope 58:1274, 1948.

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Honor-Unprecedented

"President for a Day"

In a move unparalleled in Michigan State Medical Society history, the House of Delegates at its last session voted unanimously to honor the Editor of the Michigan State Medical Society JOURNAL for his long and devoted years of unselfish service to the profession he so ably represents. . . Wilfrid Haughey, M.D., a worthy son of an eminent doctor father, began his life of service to medicine after graduation in 1906. . . . Since then his years have been filled with the holding of official offices in the Calhoun County and Michigan State Medical Societies—starting as MSMS Secretary in the first decade of the century; at present Dr. Haughey is serving a long and fruitful term as Councilor of the Third District and as Editor of THE JOURNAL. . . In addition to these duties, Wilfrid Haughey always has given generously of his time to ancillary health and service organizations of his city, county, state and nation. . . . In grateful recognition, the many thousands of his fellow doctors of medicine in this state chose to honor him as their Michigan State Medical Society "President for a Day."

WILFRID HAUGHEY, M.D.

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Detroit's Most Correct Address

Three-Minute Medicine

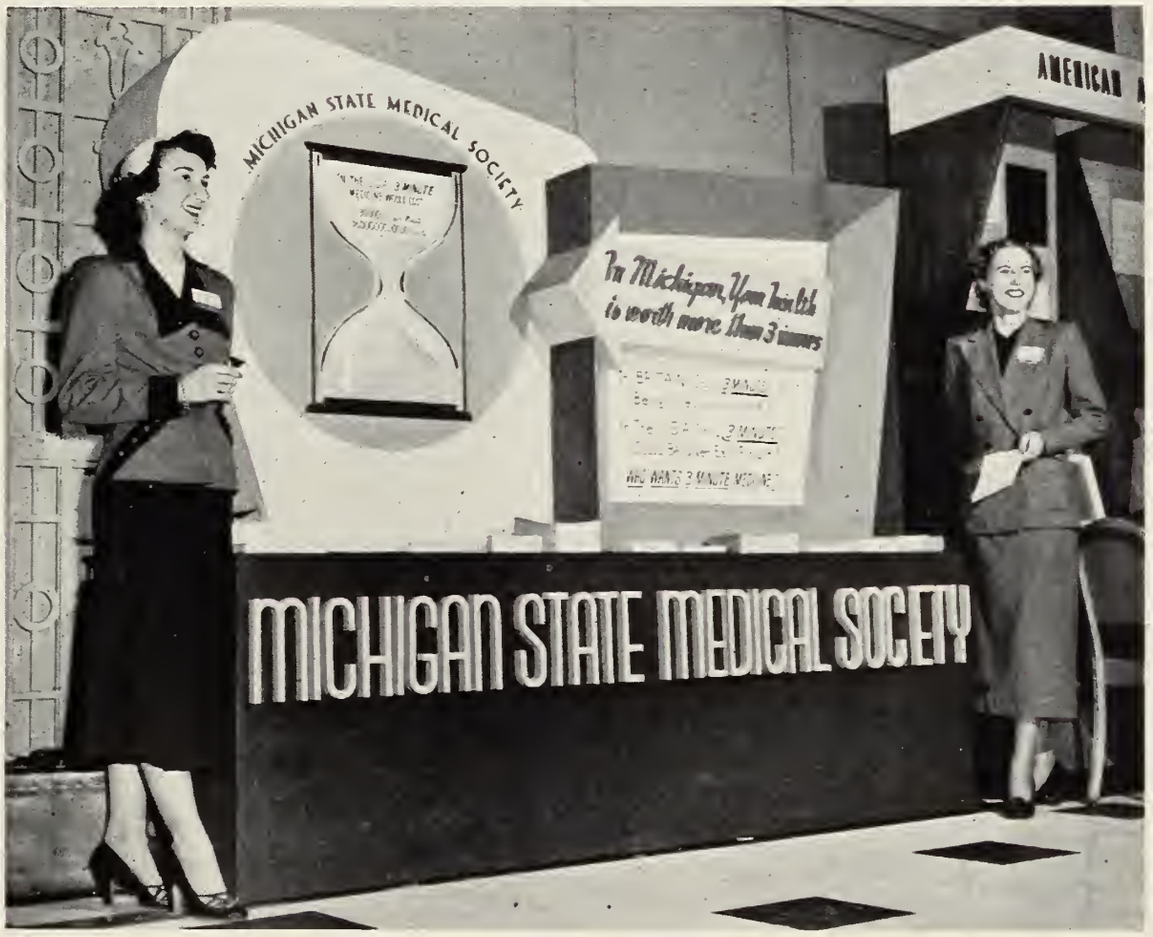
The suggestion of a Saginaw physician, John E. Manning, M.D., presented to several hundred Michigan State Medical Society members at the January, 1950, Secretary's and Public Relations Conference and adopted by that body, has grown in stature until it is creating nationwide attention —in fact the "hour glass" dramatization of the inadequacies of "Three-Minute Medicine" tends to become one of the most potent devices yet used in the campaign against socialized medicine.

The daily mail brings new evidence of the idea's acceptance as witness a letter from the Medical Society of New Jersey telling of their use of 2,000 hour glasses at their annual meeting. Other letters from state medical societies, insurance companies, medical-dental service bureaus and individuals indicate the widespread and increasing use of this inexpensive, silent reminder of the "three-minute medicine" that accompanies socialization of the healing professions.

The first national organization to endorse the idea was the National Association of Medical-Dental Bureaus, Inc., whose President, Mr. Carl G. King of Saginaw sent letters to all Association members explaining the presentation. Following this letter, bureaus in all parts of the United States ordered timers for distribution to their friends in the health professions.

In the belief that publicity may tend to destroy some of the effect upon the doctor's patients, the plan purposely has been "played down." How-

(Continued on Page 684)



The attractive Michigan State Medical Society "hour glass" exhibit was developed for the Michigan's Postgraduate Clinical Institute of March, 1950. It dramatizes "Three-Minute Medicine" and use of the small hour glass to highlight the excessive costs and the paucity of treatment possible under socialized medicine. This exhibit (minus the young ladies, Miss Glorianne Jaworski and Mrs. Orill D. Danby, Michigan State Medical Society secretaries) is now available for use by county medical societies at the various county fairs and exhibitions now approaching. Write the Michigan State Medical Society, 2020 Olds Tower Building, Lansing 8, Michigan, well in advance of the dates for which the display is desired.

Cancer Comment

NATIONAL CANCER RESEARCH PROGRAM

The fourth annual report of the Committee on Growth of the National Research Council to the American Cancer Society contains much interesting and worthwhile information on the present status of cancer research as financed by the American Cancer Society.

The Committee on Growth is composed of "twenty distinguished doctors of medicine and of the basic sciences. The Committee, in turn, is assisted by twenty subcommittees, or panels, with a total membership of ninety-seven." These panels are grouped under sections on Biology, Chemistry, Chemotherapy, Clinical Investigations, Physics, and Fellowships.

The cancer research program, "by the end of its fourth year, was enabling 220 recognized scientists, fifty-four research fellows and some 540 professional, technical, clerical and other assistants to carry on approximately 240 individual research projects in ninety-five universities, hospitals and laboratories distributed over thirty-one states."

The announced objective of this entire research program is "to find means of eliminating cancer as a health problem and meanwhile relieve suffering and increase the individual's years of useful life to the utmost."

Among the more spectacular advances in knowledge of cancer as a result of this research program are the following:

"New evidence relating to changes in blood serum of cancer patients, opening up the possible development of a practical blood test for cancer.

"Evaluation of anti-folic acid compounds as a treatment of definite but limited benefit in treatment of acute leukemia.

"Discovery of the vast potentialities of the hormones, ACTH and cortisone, in treatment of rheumatism and other diseases, and preliminary testing of these drugs in cancer.

"Discovery that a new chemical compound—guanazola—will inhibit the growth of certain types of cancer in mice without apparent toxic effects to the animal.

"Further evidence that chemical agents which produce 'environmental cancer' also causes changes in the hereditary pattern of the body's cells."

Due to the fact that cancer is many diseases with one name, it is necessary to test several types of cancer against any one diagnostic or treatment agent before reaching definite conclusions as to that agent's value in cancer control.

In the study of hormones, the evidence so far obtained points to these studies as among the most promising lines of approach to the solution of the cancer problem. Accordingly, the program in this field and its financial support in the immediate future will engage a greater proportion of the personnel and finances than in previous years. The work will be carried on by a special Panel on Hormones.

A bibliography of 513 articles published during the past year of work supported wholly or in part by Committee on Growth is appended to this report.

The report also contains a description of each research project supported by the Committee during the past year.

Noting the eagerness with which the scientific world as well as the general public awaits word of new and helpful scientific discoveries in the field of cancer control, the Committee on Growth warns against premature publicity of new but untested information regarding the causes and treatment of cancer in the following emphatic statements:

"All feelings of compassion and concern advise him (the researcher) to hasten with the discovery of more effective means of controlling cancer, whereas scientific method and reason dictate that he approach his encouraging but fragmentary findings deliberately and judiciously. The risk of error is great. In kindling premature hope for the eradication of the disease beyond the limits of present means, we would succeed only in feeding the fires of disappointment and despair."

The Committee revealed that $1,797,619 of American Cancer Society funds had been allocated for the research program in 1950. In addition, $180,538 had been allotted to forty-six Fellowships and $148,000 for thirty-six Damon Runyon Cancer Fund Fellowships, making a total of $2,126,157 available for cancer research purposes from these sources for the current year.

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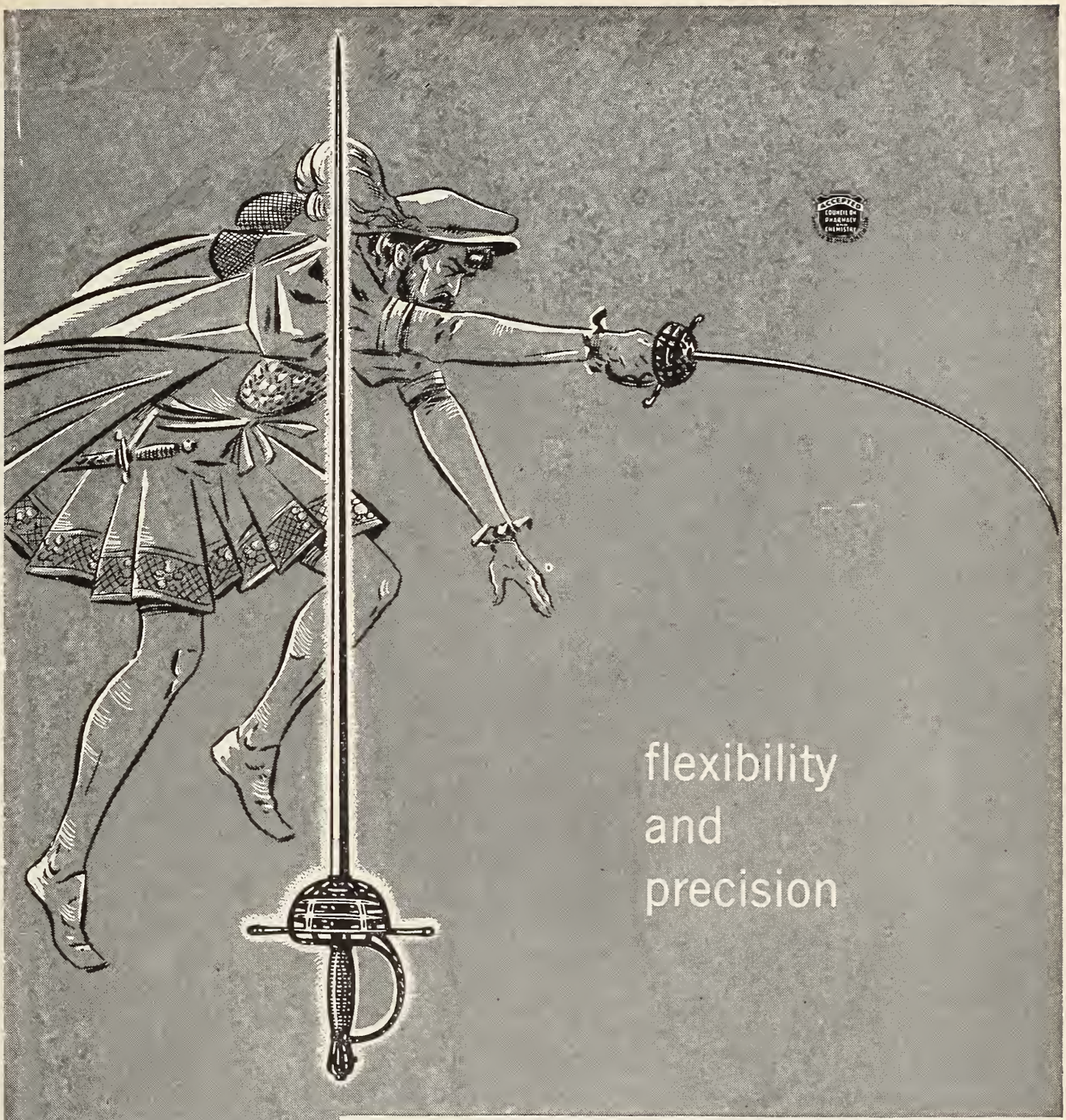

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Editorial Comment

ONE WAY TO GET A DOCTOR

A Michigan State College survey on Michigan health care discloses that a majority of the people in the rural areas feel there is a general need for more doctors.

This probably is an accurate reflection of conditions outside of Detroit particularly, and the other urban areas of the State. Shortages of doctors is even felt in some urban districts not covered by the survey. That being the case, it must be more acute in the smaller towns and villages.

If the people who thus complain of inadequate facilities really want to improve conditions in their communities, we have a suggestion to make.

They might demand of their Representatives and Senators in the State Legislature that those gentlemen see to it that adequate funds are made available for Michigan's two medical schools, at the University of Michigan and Wayne University.

If the State wants doctors badly enough, Wayne and University of Michigan can supply more if the schools are given enough State help to enable them to enlarge their physical plants, their faculties and their student bodies.—Lead Editorial, *Detroit Free Press,* May 4, 1950.

NO PARALLEL

Scotland is having a smallpox epidemic of such virulence that Britons entering this country are detained in quarantine unless they can show proof of recent vaccination. To Americans, a sweeping smallpox epidemic is one of those dread things now left far behind; an unthinkable today.

We cite this to emphasize the tremendous gap between the levels of medical science's application in America and in Great Britain.

In refusal to recognize this difference lies the fallacy of those who argue for socialized medicine in the United States because it works after a fashion in Britain. It works far from well, but even granting it a nonexistent perfection there still can be no parallel drawn between the two nations.

Much which in some measure can apply in the British case has no relationship whatever to anything we have. The instance of the Scots smallpox plague vignettes as well as anything possibly could the futility of trying to compare America and Great Britain from a public health standpoint.—Editorial, *Detroit Free Press.*

"GRASSROOTS" OBLIGATION

". . . The AMA cannot support or oppose candidates for public office. That is not the province of the AMA or of State and County medical societies. But every doctor, in his own community, if he believes in sound medical practice, and if he believes in maintaining American freedom, not only has the right to support candidates who square with his convictions but he has a sacred obligation to do so."

This exhortation, from the report of the Coordinating Committee of the AMA given at the December, 1949, meeting in Washington, should be heeded by every physician. He should find out, before casting his ballot, how every candidate for public office stands on the President's socialized medicine proposal. And if he should get his patients to do likewise, candidates will understand, unmistakably, the sentiments of the voters.—*Norfolk Medical News,* March, 1950.

CANCER COMMENT

(Continued from Page 636)

Second Michigan Cancer Conference

The second Michigan Cancer Conference, sponsored by the Cancer Control Committee, Michigan State Medical Society, will be held in Grand Rapids at the Hotel Pantlind on Wednesday, October 18, 1950. The program will consist of four short papers on special subjects pertinent to the cancer control problem in Michigan, followed by a luncheon and question-and-answer period. The conference will adjourn by 2 p.m.

The program is now being organized and will include a lay speaker of national prominence. The annual meeting of the Michigan Division, American Cancer Society, will follow the conference immediately so that those wishing to do so will be able to attend both meetings. The conference is being co-sponsored by the Michigan Division, American Cancer Society. Members of the Michigan State Medical Society are cordially invited to attend.

. . .

Pain, gross rectal bleeding, change in bowel habits, weight loss and anemia are the major symptoms of carcinoma of the large bowel.

. . .

The survival rate for carcinoma of the rectum is only half that for lesions above the rectum.

. . .

Most cancers that arise in burn scars make their appearance at least 20 years after the initial burn.

. . .

Skin graft all burns and do it preferably as part of the initial course of post burn care.

The JOURNAL
of the Michigan State Medical Society
Issued Monthly Under the Direction of the Council
VOLUME 49 JUNE, 1950 NUMBER 6

Trends in Gynecology and Obstetrics

By Palmer E. Sutton, M.D.
Royal Oak, Michigan

IT IS a great honor and privilege to be asked to evaluate trends in obstetrics and gynecology.

Headlines of Present-Day Trends

The trainee in our field today receives background and reinforcements in the allied basic sciences. He is equipped to deal with the medical as well as the surgical problems peculiar to womanhood. Most men attracted to this specialty by its surgical facets find that functional and medical gynecological disorders far exceed the surgical. Surgery, while glamorous and necessary in our present state of knowledge, is frequently replaced when better understanding evolves. Witness the elimination of repairs for fistulae and extensive birth canal lacerations of former generations with the improvement in management of labor and delivery. Witness the obsolescence of surgical suspension of the uncomplicated retroverted uterus which occupied such a vast amount of the gynecologist's energies a generation or so ago.

There is a remarkable improvement in maternal morbidity and mortality. Hemorrhage, infection, and so-called toxemia of pregnancy still remain the leading causes of maternal death (Figs. 1 and 2).

Abortion remains one of the most common complications of pregnancy, variously estimated to occur in one-tenth to one-fifth of all pregnancies (Fig. 3). The field of nutrition[2,3,8,25] still offers excellent opportunity to improve our results in all phases of human disease whether it be fortification to surgery or prophylaxis against psychosis, anemia, irregular menstruation, uterine bleeding, toxemia of pregnancy, or prematurity.

Prematurity is still the greatest single cause of natal and neonatal mortality (Fig. 3). Our efforts continue to understand phenomena believed related to the endocrine glands. Psychosomatic considerations continue to be explored in all fields, from infertility to uncontrollable uterine bleeding to labor without fear. Extensive surgical experiments are being tried to improve our results with carcinoma of the cervix.[18] Spinal anesthesia is finding more enthusiastic adherents for the termination of labor and delivery. High continuous spinal is being tried to control the fulminating toxemia and eclampsia.[17] There are new ways to study uterine inertia.[12,13,22,24] There are new functional activities attributed to the placenta. The above are some of the headlines; let's see what is beyond.

Hemorrhage

Hemorrhage—it is so trite to say it—may be dealt a terrific defeat if hemorrhage is anticipated in every case, if facility to replace blood is available, and if there is an alert attention to need. These most obvious "ifs" stand between us and attainable success. An old consideration—to replace blood loss—is still a trend.

Infection

We are proud of the general improvement in the campaign against infection, both in the surgical and medical fields. There are trends we still need to consider. The antibiotics are more useful if

Presented at the Fourth Annual Michigan Postgraduate Clinical Institute and Michigan Heart Day, Detroit, March 9, 1950.

their specificity is not overlooked. Abandonment of sound surgical principles or replacement of careful aseptic technique by prophylactic penicillin or other antibiotics will not enhance our results. Penicillin and streptomycin as prophylactic agents have not proven of value in prolongel labor.[15] On the other hand, reviews of trends in Cesarean section in the past decade in two New York hospitals conclude that even in the infected cases there is no maternal death from infections when all the adjuncts of modern surgery are used.[6,9] They do not find need to employ the extraperitoneal technique nor the Cesarean hysterectomy. They do employ the low flap. This trend has many adherents, and the need of the extraperitoneal approach or hysterectomy has been diminishing for several years in our immediaate vicinity and experience.

The newer antibiotics give better end results in puerperal infection than in gonorrhea, which typically and frequently produces hydrosalpinx with destruction of the endosalpinx. Recovery after the first attack of gonorrhea may approximate 60 per cent, after the second attack 30 per cent, and after the third attack—zero.

The management of pelvic tuberculosis is still not unanimously decided. Trial with streptomycin and sanatorium regime is receiving careful consideration.

Breast abscess in nursing women is rarely seen when early administration and proper dose of penicillin is given in breast infection.

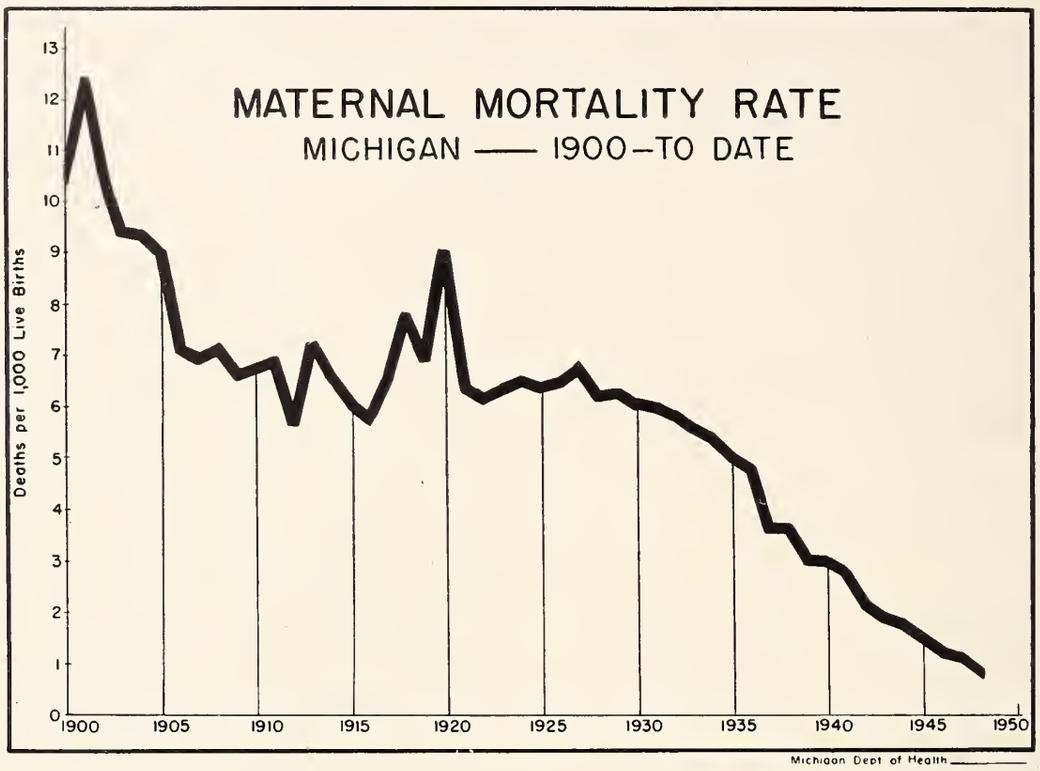

Fig. 1.

Abortion

In evaluation of the abortion problem—I mean the spontaneous, unwelcome abortion—we have reason to believe the rate among the pregnant population is 10 per cent. By and large, those spontaneous abortions occurring up to ten weeks are due to defective or pathological fertilized ova. We have no means to correct or alter this group. When abortion repeats itself in the same patient,[14] the cause is the same in 58 to 80 per cent of the patients aborting and the pathological ovum is the recurrent cause 62 per cent of the time. Beyond ten weeks a smaller number who abort still show pathological ova. Further, without any interference or guidance on our part, the spontaneous cure rate for successive abortions is as follows:

TABLE I. SPONTANEOUS CURE RATE FOR SUCCESSIVE ABORTIONS

Eastman and Malpas

Succeeded in Subsequent Pregnancies Spontaneously	
Abortus i	87%
Abortus ii	63%
Abortus iii	16%
Occasional Aborters—Above	87%

We are left, therefore, to discover and influence factors in the abortus i group of less than 3 per

cent, in the abortus ii group of 27 per cent, and the abortus iii group of 74 per cent of subsequent pregnancies.

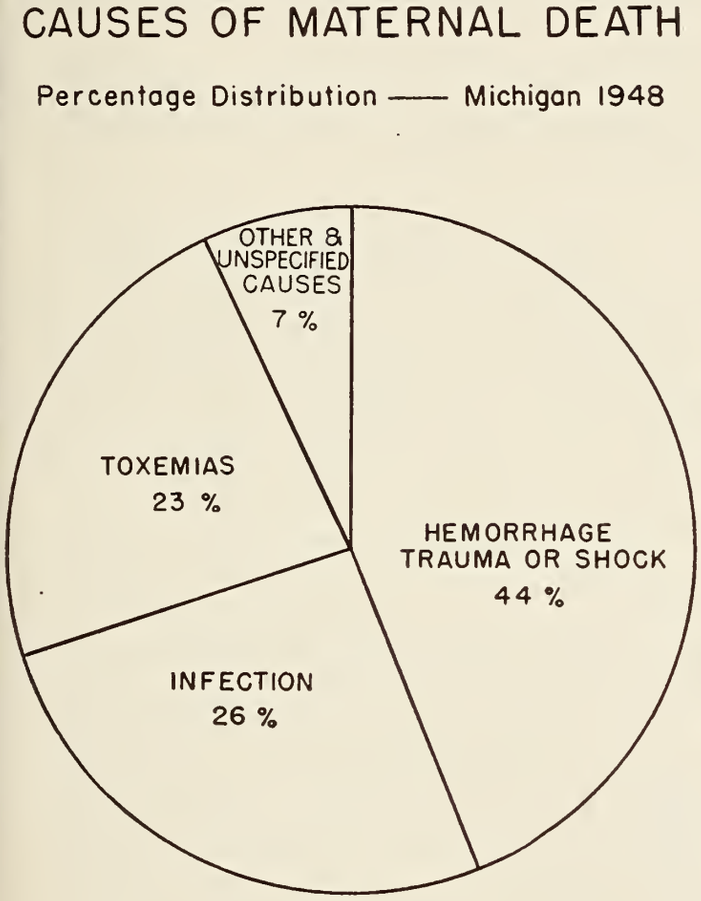

Fig. 2.

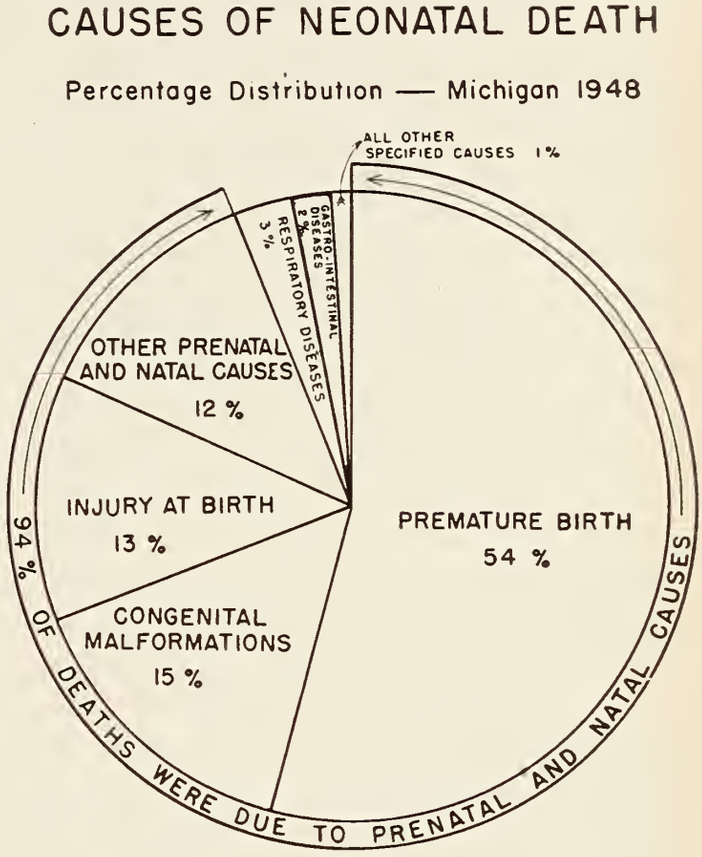

Fig. 3.

Our scant knowledge about patterns for deficiency of thyroid, of nutrition, of chorionic gonadotrophin, estrogen and progesterone, and of vitamins is the frail structure upon which our therapy depends.[5,16] The assumption is made that we are capable of detecting and understanding the way of correcting all the known maternal factors in advance, such maternal factors as gynecologic disease, syphilis, nephritis to mention only a few. Beyond this, we are reduced to giving thyroid, when indicated, which has been the sheet anchor for many years, but why is not known. We have all tried progesterone without too convincing results and studies indicate that progesterone deficiency alone is rare. Vitamin E, C, and K are under judgment. Others claim improvement with the early administration of stilbestrol.

Cancer Detection

The examination of smears of the exfoliating epithelium of the cervix and uterus has now been done in several large series. It may be stated, that as a screening technique, the method will uncover 1.5 per cent of invasive carcinoma and probably an additional 1 per cent of pre-invasive carcinoma among the general population.[19] The cost of detecting a single case of pre-invasive carcinoma is estimated at $120 to $150.

TABLE II. VALUE OF VAGINAL SMEAR
Vincent Memorial Hospital—Graham and Meigs

1942-1948	
Cases—8131 Slides Cancer—432	
False positive error diminished each year. Current	0.04%
Positive smears mean presence of cancer.	
False negatives	10%
Smear and biopsy accuracy	98.0 %
Smear and biopsy are complementary.	

TABLE III. PAPANICOLAOU SMEAR METHOD
Woman's Hospital, Beaver

Cases (2-15-47 to 2-23-50)	3,993
Positive or suspicious by smear	122
Confirmed positive by biopsy	71
Proved negative by biopsy or follow-up	26
Not yet proved by follow-up	25
Including all vaginal smears and body fluids to date.	
97 Cases followed. 71 Proved positive.	
Accuracy	73%

The smear is not a rival of the biopsy in the diagnosis of cancer but is considered complementary. Whenever either method is indicated the failure of each is about the same, approximately 10 per cent; but when both methods are

used the diagnostic accuracy approaches 98.3 per cent.

The problem of training an adequate number of competent technicians to carry out smear technique surveys remains without solution.

The public awakened by the educational program of the American Cancer Society expect sober, thorough attention to cancer detection. Our whole armamentarium, short of smears and biopsy, consists of careful history and meticulous inspection and palpation.[20] Some have used and continue to use the iodine test of Schiller which gives a brown color to normal stratified squamous epithelium containing glucose. The areas at the squamo-columnar border not taking the stain indicate the point where biopsy is to be taken. Not all such biopsies will be returned as cancer.

Increased effort on our part in conducting routine regular detection should pay off by a discovery of carcinoma at an earlier stage.

Toxemia of Pregnancy

Until we know the cause of toxemia, better called eclampsia, and mild or severe pre-eclampsia, we continue to try to prevent or treat symptoms. Much can be accomplished by prenatal care which keeps the physiological tendencies of pregnancy from becoming exaggerated. In recent years, emphasis has been on adequate protein intake of 85 grams or more daily, low sodium and salt intake, thyroid where indicated, weight gain not in excess of 25 to 30 pounds, and maintenance of the hematocrit at as high a level as possible. Also evaluation and elimination of psychosomatic factors such as severe emotional and mental conflicts are believed to be important. Patients with essential hypertension and previous toxemia deserve special study, as do also those with albuminuria or previous evidence of nephritis. Patients not controllable in a few days belong under more strict observation in the hospital where sedation, veratrone or continuous spinal may be available. Continuous spinal maintaining a level of anesthesia between T 3 and T 8 will cause a drop in blood pressure. This drop is usually progressive and slow over a period of an hour, as much as 50 to 110 mm. of mercury. In most instances there is an increase in urinary output. Convulsions are controlled without resort to other sedation. The patients' mental cloudiness clears. They are able to drink and eat. There is no harm to the fetus. When the urinary output remains scant, hypertonic glucose usually improves it. When it is determined that the patient is under control and she is at or near term, the membranes are ruptured and ½ minim doses of pitocin may be given.

The vast majority of patients who have fulminating or severe pre-eclampsia have had little or no prenatal care.

Teac and High Spinal and Veratrone

Very excellent comparative studies have been made in Cincinnati under the direction of N. S. Assali with TEAC (tetraethylammonium chloride), high spinal, and veratrone.[1] The charts shown here were obtained in the Cincinnati General Hospital, Department of Obstetrics.

TEAC blocks the autonomic nervous system at the ganglionic level. A standard dose given intravenously to patients with hypertension of neurogenic origin produces a marked drop in blood pressure to a level called "floor.' '"Floor" is supposed to represent that portion of blood pressure maintained by a humoral component, together with the intrinsic tone inherent in the vessel walls. The depressor effect is achieved through a blockade of the sympathetic vasoconstrictor pathways to the arterial and possibly the venous system. The greater the neurogenic component of hypertension, the more marked is the effect of TEAC.

It has been claimed by Hingson and Whitacre[26] who have treated pre-eclampsia with spinal anesthesia, that the pooling of the blood in the extremities does not prevent excellent urinary output and improves the cardiac condition. H. W. Smith, Rovenstine, Goldring, et al deny this.

In the past year we have had occasion to use continuous spinal anesthesia at Woman's Hospital for the treatment of very severe pre-eclamptics and to now we are impressed with its usefulness. It probably should be reserved for the severe, fulminating case who has been neglected or who is not responding to lesser measures.

Veratrum viride in the form of veratrone (Parke Davis & Co.) has been used in only a few centers in the United States. I have used it occasionally as a temporizing expedient while studying a patient who seemed to be fulminating, with moderate conviction of its usefulness. The recent careful evaluation of its pharmacologic action places it much higher in its position of usefulness.

Spinal Anesthesia

Many of us believe that the use of spinal anesthesia for delivery in obstetrics is one of the outstanding developments of recent times. Caudal metacaine 15 mg. or nupercaine with glucose 2.5 to 3 mg. is technically easier, more quickly given and takes effect immediately. For terminal one dose anesthesia in occiput presentations, it is given

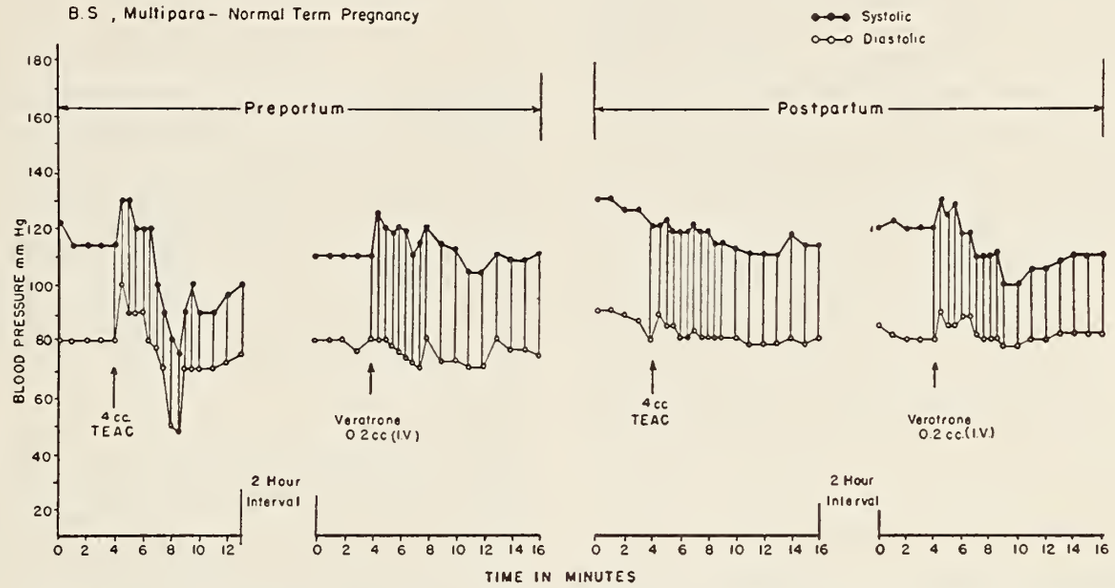

Fig. 4. *TEAC and veratrum viride in normal term pregnancy.* TEAC caused a drop to "floor" of 75/48 in prepartum patient. TEAC caused a negligible drop in postpartum patient. Veratrum viride caused a negligible drop in both the prepartum and postpartum patient.

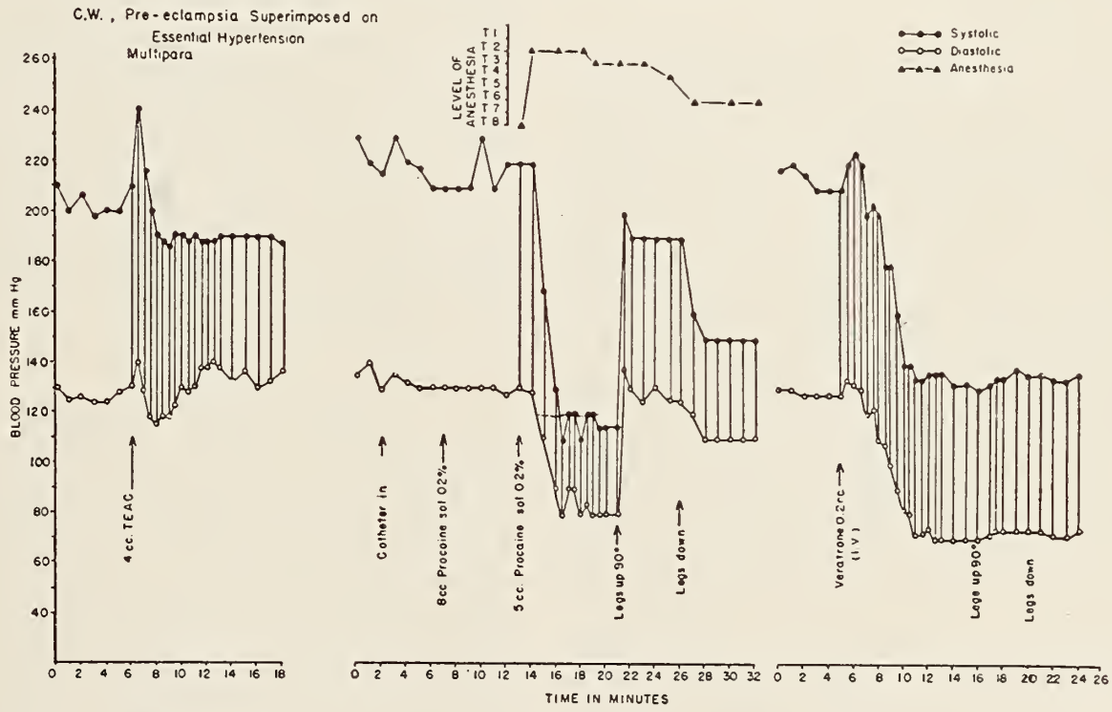

Fig. 5. TEAC causes drop of 40/20 mm. which is relatively negligible. Spinal—T 3 to T 8 level. Drop 100/50. Veratrone (intravenously)—.2 c.c. Drop 100/60 mm. When the legs are elevated 90 degrees, only under spinal does the pressure go up to approach previous level and drops to less degree when legs are returned!

arrived with much fan-fare and spinal had a bad reputation to overcome in obstetrics. Previous sad experiences with spinal, using much larger doses than currently, created this bad reputation. Caudal is still an excellent method of conduction anesthesia, but requires extra manpower to give it and watch it. Spinal, using procaine 35 to 50 mg. or during the latter part of the first stage and is frequently sufficient for the second and third stages and repair of the episiotomy. If this is preceded by 100 mg. of demerol, with or without scopolamine, the average patient, primipara or multipara, will need nothing else and be very happy with her experience. I am sure the babies are better with con-

duction anesthesia. The mothers with spinal and early ambulation and immediate food intake are twenty-four to thirty-six hours ahead of their sisters who receive general. In decomposition of a breech the addition of general may be advisable. In premature labor, conduction anesthesia is obligatory without demerol or barbiturates. The only drawback with spinal is headache, about one in ten. Very few of these headaches are severe, however. The severe ones must limit the time allowed in the vertical position for one, two or three days. The majority will be controlled with a very tight, wasp-like binder. Since it is reasoned that the severe headaches are due to leakage of spinal fluid, it has been recommended and practiced by some to inject saline solution intrathecally until the headache is relieved. I have as yet never found it necessary.

Uterine Inertia—False Labor

The clinician has long needed more accurate means of measuring uterine activity than mere clinical impression and clinical response to sedation and stimulation.

Studies now in progress,[12,13,24] preliminary reports of which are published, indicate the direction of things to come. By means of a tokodynamometer and more recently, by means of recording electrical activity in the uterus, as has similarly been done for a long time now for cardiac muscle, certain patterns can be demonstrated for false labor, for uterine inertia, and effectual labor. Very briefly stated, effectual labor and rapid dilatation of the cervix occurs when the intensity of contractions and amount of work done is greatest in the fundus, less in the mid-segment, and none in the cervix and lower segment. The pattern for uterine inertia may be variable as to intensity, but there is the same intensity of contraction or nearly so in all three segments. In both false labor and uterine inertia, though the patient experiences severe pain, little or no activity is registered in the tokodynamometer or electrohysterograph. Further, the response to stimulation with pituitrin, in so far as it may be stated at present, is that the most favorable physiological patterns are induced when the pituitrin or pitocin are given by the i.v. dilute drip method. The dilute i.v. drip method has been noted to be safe in dilutions delivering 1/4 to 1/2 minims of pituitary extract per half hour and any tendency to tetanic contraction of the uterus or slowing of the fetal heart tones may be immediately controlled by stopping the flow of the i.v. fluid. Obviously, we are hopeful that such methods of differentiating more accurately false labor and uterine inertia and improvement in their management will be available to us soon.

Prutitus Vulvae

Pruritus vulvae is a very disturbing condition evading correction in many instances. It is due to a great variety of causes, such as: (1) generalized dermatoses; (2) primary disease of the vulvae, as leukoplakia, kraurosis, or the atrophy of menopause; (3) mycotic vulvovaginitis and dermatophytosis and nonspecific bacterial infections; (4) chemical causes, such as diabetes; or (5) psychotic cause.

Recent observations give us a new relieving agent, namely, certain fatty acids and of these, especially propionic acid. With the exception of pruritus vulvae due to mycotic infections and psychotic reasons, the relief is gratifying. In most of these conditions there is a loss of the natural protective substances from the secretory sweat and sebaceous glands which the propionic acid supplies. Further, propionates are found to be fungicidal and bacteriostatic against the skin cocci. The use, therefore, of a 15 per cent sodium propionate ointment applied two or three times daily is suitable externally, and the use of a 5 per cent sodium propionate douche morning and evening or a cocoa butter suppository of a 10 per cent sodium propionate is recommended.[4]

Heart Disease in Pregnancy

Best results are obtained when the obstetrician entrusts to the internist the evaluation of symptoms resembling or pointing to heart disease. This team is responsible for: (1) marked lowering of the radical procedures at delivery or termination of pregnancy—especially Cesarean section; (2) increasing the number of cardiac patients who are able to have children; and (3) marked diminishing in the indication for therapeutic abortion.

Development of Placentology

Until recently the opinion prevailed that placental function could be explained best on the assumption of a resemblance to a semi-permeable membrane.

Recent observations[21,27] indicate that, in addition to its functions as an organ subserving the cata-

TABLE IV. INCIDENCE OF LATE PREGNANCY TOXEMIA

Smith and Smith — Stilbestrol vs. Controls

Primigravida Only

	Combined series A & B Treated	%	Control	%
Total	385		555	
Pre-eclampsia				
Grade i	8		30	
Grade ii	1		7	
Eclampsia	0		1	
Totals	9	2.3%	38	6.8%

TABLE V. INCIDENCE OF LATE PREGNANCY TOXEMIA

Sutton, Koehler and Smith

	600 Pregnancies Past History	%	Present	%
Total pregnancies	844		600	
Abortions	— 150	17.7	— 53	8.8
Viable to full term	694		547	
Toxemia	16	02.3	9	1.06

TABLE VI. NINETY-FIVE PREGNANCIES TREATED WITH STILBESTROL

Sutton, Koehler and Smith

Indication: Past history of abortion, prematurity toxemia, essential hypertension, and stillbirth	Past History	%	Present-Treated	%
Total Pregnancies	152		95	
Abortions	— 62	40.8	— 20	21
Viable to full term	90		75	
Toxemia	16	17.7	3	4.0

TABLE VII. EXPECTANCY OF INCIDENCE

Sutton, Koehler and Smith

547 Recent viable pregnancies.

95 Treated with Stilbestrol. All indications.	Past	Expectancy	Present Actual
Viable	694	547	547
Toxemia	16—2.3%	17.8—3%	9—1.06%

bolic and anabolic growth requirements of the fetus, the placenta is an endocrine organ which appears to synthesize and secrete several different hormones. It is further noted that the trophoblast has a complex organization involving proteins, carbohydrates, lipids and a variety of enzymes.

The cytotrophoblast is the place of origin of chorionic gonadotrophin, proteolytic and cytolytic enzymes, whereas the syncytium is the site of origin of the placental steroid hormones.

Further Possible Factor in Prevention of Late Pregnancy Complications

Dr. O. Watkins Smith and Dr. George Van S. Smith have continued for the past decade or more with their thesis that diethylstilbestrol was of value, in proper dosage, during pregnancy in preventing some abortions. It is contended also by them that stilbestrol will prevent late pregnancy complications in patients in whom pre-eclampsia, eclampsia, premature delivery or stillbirth was anticipated because of their past medical or obstetrical histories. The Smiths contend that they have shown that late pregnancy toxemia, premature delivery and death of the fetus in utero are preceded by a *premature* deficiency of estrogen and progesterone. Evidence is further at hand that this hormonal deficiency, once established, may be a part of a vicious cycle in which lack of hormonal support, vascular deficiency, and toxin formation augment one another and that any one of these factors, unless corrected, may eventually lead to all three factors.[23]

Their studies further indicate that any situation which affects adversely the blood supply to the uterus will interfere with the normal production and metabolism of the placental steroid hormones, estrogen and progesterone. The combined action of estrogen and progesterone, on the other hand, is characteristically one of increased myometrical and vascular growth. By the administration of stilbestrol and provision thereby of an extra stimulus for the production of estrogen and progesterone, the Smiths do not expect to avert completely all pregnancy complications in their clinical trial with all primigravidas. However, they feel that with the use of stilbestrol the onset of such complications should be postponed, their severity reduced, and, in a certain proportion of patients who would ordinarily have no trouble until late in pregnancy, entirely prevented.

In order to obtain some clinical evaluation of the Smith and Smith's treatment with stilbestrol, we are giving it to selected patients. These patients are selected because of previous history of toxemia, essential hypertension, premature delivery, still birth and abortion. These are the conditions contended by the Smiths to be benefited by stilbestrol. Our series is much too small to draw conclusions.

Our incidence of pre-eclampsia and eclampsia in the most recent 1,500 patients delivered beyond the twenty-fourth week is less than 3 per cent. In the most recent 547 patients delivered, it is 1.06 per cent. This includes ninety-five patients who were given stilbestrol according to the Smith schedule, and in this group we reduced their incidence of abortions to 20 per cent from 40 per cent in the past and their incidence of toxemia in the past of 17.7 per cent to 4 per cent.

We believe that our incidence of toxemia, espe-

(Continued on Page 749)

Preventive Pediatrics

By A. M. Hill, M.D.

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THE TOPIC of preventive pediatrics is one which covers a multitude of subjects, too numerous to discuss in this space. Some material will be omitted in its detail or entirely; for example, I do not wish to discuss the routine immunization programs, as the State Health Department has covered this field thoroughly in a bulletin published and distributed in 1949. I prefer to mention certain specific topics in which we may apply prophylactic principles and a few topics still in the realm of speculation.

If we examine the importance of good prenatal care to the well-being of the newborn infant, we find that the routine Kahn test and treatment if positive in the pregnant woman has done much to reduce the number of congenital luetics in our country. To prevent other types of infection in the mother, to prevent toxemia, or to skillfully manage the toxemic woman, to give proper attention to the nutritional state of the pre-pregnant as well as the pregnant woman can further lower our morbidity and mortality rates in the newborn.

In addition to improving our medical care of the pregnant woman, we should, in larger localities, establish educational programs for acquainting the future parents with normal physiology, basic food requirements, general care of the newborn infant including such basic information as bathing and certain simple suggestions on the psychological relations between parents and the newborn baby. In smaller communities the overworked physician or his office assistant may find time to go over the basic details or at least to have pamphlets available in the office to cover the subjects above mentioned.

It is not too much for our patients to expect those of us caring for lying-in cases to have Rh-typing of the mother and father. Where the Rh-negative mother and Rh-positive father exist or when we obtain a history of previous multiple miscarriages, jaundiced or anemic babies, the least one can do is to have Rh-negative blood (Diamond says from a female donor) available or make arrangements at a nearby hospital prepared to do exchange or repeated transfusions in the event the infant is found to be suffering from erythroblastosis fetalis. Where histories indicate possible immunization in the mother, it is wise to check the blood for anti-Rh agglutinin as early as the sixth month of pregnancy, and a recheck should be made at intervals of a month. If the titre is rising, an anemic or jaundiced baby should be anticipated. This does not always occur, as I have seen one mother whose titre was 1 to 1000 deliver a perfectly normal infant. A different approach to the prophylactic treatment of the Rh-negative mother known to be producing Rh antibodies of significantly high titre has been described recently by Carter, Loughrey and others. Using injections of Rh hapten obtained from Rh-positive blood cells they seem to have shown that a neutralizing effect can be obtained on the Rh antibodies in the pregnant woman. Further clinical trial may prove this method worthy of general use.

Much information has accumulated regarding prenatal factors influencing diseases and malformations. Many pathological conditions are inherited as dominant traits, for example, Huntington's chorea, multiple exotosis, hemolytic icterus, neurofibromatoses, diabetes, hare lip, cleft palate, spina bifida, cerebral ataxia, and progressive muscular dystrophy are among the group. The application of the knowledge of eugenics may become important in eliminating some of these conditions in the future.

Nutritional insufficiency may adversely affect the embryo. For example, iodine deficiency in food and water results in goiter and endemic cretinism. The use of iodized salt in the Great Lakes region for many years is a good example of a preventive measure employed successfully. More evidence is accumulating to indicate that the so-called "trace minerals" are needed for good health in livestock as well as in humans. Many believe that the trace minerals such as Boron will be found to play an important role in proper nutrition in the future.

Pregnant women who have a low metabolism rate, or those known to have required thyroid to promote pregnancy, should be treated while pregnant to prevent robbing the offspring of its own thyroid hormone. Not infrequently I have seen evidence of an exhausted thyroid in a young child, and upon questioning have found that the mother before pregnancy had been on substantial thyroid therapy, only to have been advised against its use

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during the pregnancy. To continue the thyroid during pregnancy is good prophylaxis, and I think will result in improved infant health in such cases.

Extensive studies have shown significant relationship between the diet in pregnancy and the physical condition of the newborn infant. Premature, stillborn, and functionally immature infants are born more often to mothers who have been on inadequate diets during pregnancy than to those mothers on proper diets.

Injuries to the infant from infection in the mother are known to occur. One of the best examples being that offspring of women who suffer attacks of German measles during the first two months of pregnancy are prone to show congenital cataracts, heart disease, mental retardation and deafness. Prevention of this type of infection during early pregnancy is important. Avoidance of exposure of the pregnant woman not known to have had German measles in childhood should be encouraged. After exposure prevention by the use of injections of pooled adult serum or plasma has been advised, and it appears that the use of gamma globulin may be found to be effective, although in a personal communication from Dr. Joseph Stokes, he stated that he knew of no well-controlled work to prove its efficacy. However Dr. Stokes thinks it is worth while using under proper circumstances.

Congenital toxoplasmosis and lues are two more examples of injury by infections.

Actinic rays may also cause harm to the young fetus. Inadvertent use of radium and x-ray therapy during early pregnancy may result in microcephaly, spina bifida and other skeletal abnormalities. The inference to draw is that great care should be exercised in the use of these therapeutic rays in women of child-bearing age and a menstrual history should be obtained to prevent avoidable harm.

It is known that obese people are ten times as likely to become diabetics as those of average weight. Because of the familial tendency for diabetes it becomes of obvious importance for us to prevent excessive overweight in children. We should attempt to encourage moderation in the diet among those already obese, particularly in families in which diabetes is common.

Most authorities are of the opinion that bed rest after certain acute infections as scarlet fever and diphtheria is important in the prevention of complications such as nephritis and heart involvement.

Most of you undoubtedly keep mumps cases in bed for ten days or more. Before puberty the complication of orchitis is relatively rare, but in teen agers and young adults, statistics seem to indicate that a lower percentage of complications will follow prolonged bed rest. Recently the use of 2 to 5 mg. of stilbesterol daily for one or two weeks has been reported to be effective in the prevention of orchitis and should be considered in older children in the pediatric age group.

In a recent paper Dr. Bret Ratner has given us some points to consider in the so-called preallergic child. I am quoting the essence of some of his statements. "Intra-uterine life, infancy, illness and convalescence are vulnerable periods during which protection against highly antigenic substances is especially important. . . . Every child is potentially allergic. When unchanged or whole proteins enter the permeable placenta, respiratory or gastrointestinal tract, antibodies are formed and become fixed in the body cells. Repeated entrance of the antigen may precipitate true allergic episodes."

"Prenatal sensitization may occur if a woman overindulges in some foods during pregnancy. A widely varied diet should be prescribed and followed." The craving for food and eating of excessive quantities of milk, chocolate and other strongly antigenic foods may, according to Ratner, sensitize an unborn infant.

"If a newborn infant is given supplemental raw milk and possibly some dry milk formulas temporarily during the prelacteal period, then put onto breast entirely, milk sensitization may appear when weaning is attempted. Allergenically denatured milk, for example, evaporated milk, should be used for the temporary formula."

Early infancy is a time when allergic responses may be induced by thoughtlessness in starting of certain strongly antigenic foods. For example, it is a mistake to allow an infant to have raw egg, as the raw egg protein is highly antigenic, especially to infants with definite family history of allergy. In these cases it is good practice to give no egg in any form until the infant is four or five months old, when well-cooked custard is tried. If after a month on this egg containing preparation no eruption, no respiratory or gastrointestinal symptoms are noted it is permissible to try small quantities of hard boiled egg yolk. Most infants at this age and of the potentially allergic group will handle the egg well if introduced in this manner.

It is a good plan not to start orange juice at a few weeks of age. It is inviting trouble in the potentially allergic infant. To use ascorbic acid

as early as two weeks of age is safe, and if all goes well one may plan to start orange juice at the fourth to fifth month of age.

Wheat is a frequent trouble maker. We use oatmeal or barley cereals in infants with allergic family histories rather than wheat containing cereals. Most vegetables, meats and fruits other than orange and tomato juice are not strongly antigenic in my experience.

In the presence of a gastrointestinal upset, sensitization may occur to a food which a child may have formerly tolerated. Increased permeability of the intestinal mucosa permits entrance of unchanged or partially changed proteins into the blood stream and this may produce allergic phenomena such as asthma, hives, and eczema. Therefore during an episode of gastroenteritis the diet should be simple and as free of strongly antigenic substances as is possible. New, raw, or lightly cooked foods should be avoided as any of these three may set up an allergic reaction.

During convalecence from an acute illness the same procedure should be followed. Common foods, as excessive amounts of milk, eggs, wheat and seasonal foods eaten at infrequent intervals and in great quantities are potential sensitizers according to Dr. Ratner. The prophylactic pathway is obvious, foods should be well cooked and new or unusual foods should be avoided during acute gastroenteritis and during periods of convalescence.

"Inhalant sensitivity during early infancy may be established by prolonged confinement in a nursery with relatively heavy dust content of the air. Especially in allergic families it may be wise to use simple washable furnishings, mattress and pillows of nonantigenic substances or an impervious cover over these acticles." Families that show marked allergic tendencies should be urged to have no pets as dogs, cats, rabbits and the like.

Some drugs and antibiotics may combine with proteins and form antigenic conjugates which may induce sensitization. Sulfonamides, penicillin, streptomycin and similar antibiotics should not be used indiscriminately for this and other sound reasons.

The use of certain vitamins is too well known to you to discuss in detail. However in recent years some of us have been impressed by the use of relatively large doses of vitamin A (25,000 to 50,000 units daily) as a means of improving an infant's or child's resistance to respiratory tract infections. In our own experience no real usefulness has been encountered with the administration of catarrhal vaccine. In spite of rather conclusive evidence that so called "cold vaccines" by mouth or hypodermic are not satisfactory, much is still dispensed. We feel that vitamin A concentrates should be added to our armamentarium. Before passing from the subject of respiratory disease prophylaxis I would like to remind you of two important considerations often overlooked. When confronted with a child presenting a history of repeated upper respiratory infections, we should not only examine the child to see if there are diseased tonsils or adenoids but we should examine the patient for anemia. A simple hemoglobin test, using the Sahli method, will often show a hemoglobin of 9 to 10 grams. The average child in excellent health will show from 12 to 14 grams of hemoglobin. Many patients in the lower ranges who also show unusual susceptibility to respiratory infections will improve on adequate iron therapy by mouth. The use of iron injections is only mentioned to condemn it as a needless and inefficient mode of administration.

It is well to bear in mind that low thyroid function may be reflected by poor resistance to infection of the respiratory tract. Not infrequently the use of thyroid when indicated will prove to be a valuable adjunct in the prophylaxis of respiratory infections.

No comment will be made on the use of antihistamine drugs as prophylactic agents against "colds" except to state that I am skeptical as to the usefulness of this group of remedies and shudder at the extravagant claims made on the air and in print.

One of the most publicized diseases in lay and medical literature is rheumatic fever. No plan has been devised to prevent the disease to my knowledge. Attention to good hygiene, adequate rest, avoidance of streptococcic infections, and proper treatment of these infections if they occur may be mentioned as general principles in prophylaxis. Considerable literature has appeared in the last ten years suggesting that the number of recurrences of rheumatic fever can be reduced by prophylactic use of sulfonamides or penicillin during the seasons of greatest incidence, that is, during the fall, winter, and early spring. Dr. A. F. Coburn was among the first to advise small doses of sulfa drugs once or twice daily. The use of one half to one gram of sulfadiazine once or twice daily has become common practice.

Penicillin troches containing 5000 to 10,000

(Continued on Page 747)

Management of Diarrheas of Infancy and Childhood

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WHILE THE past twenty-five years has witnessed a sharp reduction in the death rate from infantile diarrhea, this disease continues to remain one of the major causes of illness during the first two years of life. Were a family physician, who supervises the care of many families of children, to keep a record of the subject matter of his office and telephone conversations over a period of twenty-four to forty-eight hours, it is my impression that by far the largest number of complaints would have to do with disturbances of the digestive tract, i.e., vomiting, gas, cramps, abdominal distention, and diarrhea. Of necessity, the busy practicioner must dispose of many of these problems, so important to the inexperienced mother, by some simple plan of therapy. More often than not, the physician's service may not extend beyond giving some common-sense professional advice over the telephone, but this too is important. In listening to a mother's account of her infant's indigestion, it becomes necessary for the physician to reach a decision regarding the probable severity of the intestinal disturbance and be able to outline a treatment which will not only clear up the mild case but which will also serve to initiate adequate treatment should the case prove to be of greater severity.

It will be the purpose of this paper to attempt to present a simple classification of the main types of diarrhea, and to discuss some plans of treatment which to me have proved useful. In this discussion, I shall not deal with the several special conditions characterized by loose stools, such as ulcerative colitis, coeliac disease, pancreatic fibrosis, et cetera, but will limit the discussion to a consideration of the fundamentals underlying the management and treatment of the common types of diarrhea.

The record of diarrheal deaths for the State of Michigan over the past forty-eight years is most interesting. The sharp reduction in the number of deaths following the year 1925 calls for some explanation. Dr. Leeder of the State Department of Health states "that the reduction in diarrheal deaths noted in the 1925-1930 period corresponds with the general acceptance of chlorination of public water supplies and observes that a similar drop occurred in typhoid fever at about the same time." Perhaps several other contributing factors may have played a part, for this was the time that the general public was becoming more conscious of the importance of using pasteurized milk in the feeding of infants, and pediatric teaching was beginning to give widespread approval to the use of evaporated milk as a suitable food for infants. Still another important factor had to do with hospitalization, as the hospitals about the state began to make better provision for the care of sick infants, it was possible for physicians to give closer attention to the diarrheal problem which led to a greater appreciation of the lethal effects of dehydration, toxemia and acidosis, and by improving their methods of treatment were able to save many infants who otherwise would have succumbed.

TABLE I. DIARRHEA AND ENTERITIS DEATHS IN MICHIGAN (UNDER 2 YEARS OF AGE)

Year	No. of Deaths	Rate per 100,000 Population
1900	2503	103.4
1905	2034	79.5
1910	2295	81.7
1915	1208	39.7
1920	1860	50.2
1925	1735	40.9
1930	704	14.5
1935	216	4.2
1940	172	3.3
1945	263	4.8
1946	212	3.7
1947	199	3.3
1948	279	4.5

Courtesy Michigan State Department of Health.

Marriott, the great teacher of postgraduate pediatrics of that period, likened the dehydrated infant to a flower lacking water. Fluid supplied early enough might bring the withered flower back to life but if the dehydration proceeded beyond a certain point no amount of water would save it. While intravenous therapy had not yet been perfected, hundreds of infant lives were saved during these earlier years by the giving of saline subcutaneously and intraperitoneally.

The Digestive Tube in Diarrhea

Under normal conditions, when food and water enter the stomach, peristalsis promptly begins to function, forcing the bolus down the tract—going always forward, in the proper direction, from mouth toward rectum. With the development of diarrhea, however, the stomach and bowel tend to

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lose their rhythmical well directed milking action and the intestinal contents are swished around as in the Niagara whirlpool, going first this way and that until a vigorous contraction of the colon finally results in an explosive stool. Or if reverse peristalsis sets in, vomiting ensues. When the diarrheal case begins vomiting, it is well to forget the diarrhea and focus on re-establishing normal gastric physiology. This means omitting all oral medication and milk formulas and waiting for peristalsis to establish itself in the right direction. There is no medication and no milk formula that will "settle a stomach" when it is in reverse. It has been well demonstrated however, that certain palatable clear fluids containing glucose and salt frequently turn the trick, by supplying the elements needed to correct the body chemistry. This point will be referred to later under the discussion of S. O. G.

Diarrheal Stools

Much can be learned about the diarrheal process by a careful inspection of the stools. This can best be done by use of a tongue blade. In addition to noting the color and consistency of the stool, it is observed for presence of mucus, pus, and blood. In dealing with intelligent parents, it may be helpful to discuss with them the significance of these various findings. Many parents are concerned about the occurrence of green stools; a good explanation for such is that the green stool is one which has made so fast a trip down the tube that it did not have time to become brown. Mothers need to be taught that the presence of mucus or "slime" in the stool is evidence of inflammation of the bowel mucosa and that nature pours out the thick mucus as a protective covering. Assurance may be given that the mucus will disappear once the bowel pathology has cleared. Finding clumps of pus and blood, point to ulceration of the mucosa and usually means that a true infectious diarrhea is to be dealt with.

Stool Cultures

Should stool cultures be made a routine on all cases of severe diarrhea? The answer is yes. While it must be admitted that to date, culturing of diarrheal stools has been most disappointing so far as improving our therapeutic approach, there are several reasons why the clinician and laboratory must continue their joint efforts to learn more about the pathogens causing infantile diarrhea. The following statement from Dr. Cummings[2] of the State Laboratory summarizes the situation: "There is always the possibility that the diarrhea may be due to the typhoid bacillus or to some member of the salmonella or dysentery groups. Also we are beginning to realize in the laboratories that certain organisms which had previously been classified as non-pathogenic may have some connection with clinical diarrhea. This is particularly true of the paracolon and coliform groups. The English and Danes have suspected these organisms for a number of years. Typing sera have been prepared for studying this phase of the problem and it is therefore important that stool cultures from diarrhea cases be made available for analysis." Since this is the day of specific therapy, we as physicians must continue in our efforts to gain more helpful information from stool cultures and thereby improve our treatment methods.

It has been reported that chloromycetin can sterilize the blood and intestinal tract from typhoid organisms within a period of three days. If this be true, it is only fair to presume that some antibiotic agent will be found which will be effective in treating the diarrheas caused by the salmonella or paratyphoid group. Sulfonamides have already been shown to be effective for some members of the dysentery group. It is of course understood that many of the diarrheas are no doubt due to filterable viruses, the investigation of which is both difficult and expensive and for which there is as yet no specific therapy.

It is quite impossible at the present time to accurately classify the great majority of the diarrheas seen, for the reason that our present methods are able to identify only a few of the probable pathogens. We can however differentiate the diarrheas clinically, on the basis of their severity and epidemic nature. This requires a careful evaluation of each individual case. The clinician must arrive at an opinion as to whether a given diarrhea is of the benign type causing little systemic disturbance or whether it may be one of the severe forms which rapidly depletes the baby of his fluid, chemical and protein reserves, leading to early toxemia, acidosis, convulsions, coma and death.

Classification of Diarrhea

1. Digestive Upsets with Loose Stools
   - (a) Mechanical (green apples, green corn, berries, et cetera)
   - (b) Excess fat in formula or food
   - (c) Nervous or emotional
   - (d) Allergic

2. Fermental Diarrhea (chemical)
   (a) Excessive fermentation
   (b) Acid burning stools
3. Parenteral Diarrhea
   (a) Upper respiratory
   (b) Otitis
   (c) Pneumonia
   (d) Pyelitis
4. Enteral Diarrhea (bacterial)
   (a) Bacillary
   (b) Amebic
   (c) Typhoid
   (d) Typhoid-like (salmonella)
   (e) Streptococcic
   (f) Coliform ?
5. Virus Diarrhea
6. Diarrhea of Newborn

Basic Studies on Diarrheal Stools

In reviewing the accumulated knowledge bearing on any scientific subject one frequently finds that it was some simple piece of investigation which established the fundamentals on which future progress was based. When Holt, Courtney and Fales[5] in 1914 decided to do careful chemical analyses on diarrheal stools and to compare such analyses with those obtained on normal stools, they were undertaking a study the results of which must have far exceeded their expectations. In this study a group of twenty-one infants suffering from diarrhea were studied on metabolism frames for periods of three or four days each. Under these conditions it was possible for the observers to collect all the stools and all the urine passed by these diarrheal infants, and to gather exact information as to what a severe diarrhea does to a baby.

Several basic questions were answered by this study:

First, that very loose stools not only carry off tremendous amount of body water but that large amounts of fat, protein, and minerals are also lost.

Second, that in these diarrheal losses some elements are drained away to a much greater extent than others.

Third, that certain mineral losses are so startling that their replacement must be taken care of if the infant's acid base balance is to be restored.

An analysis of this very careful metabolic study leads to several conclusions having a bearing on the dietary treatment of diarrhea, and it is interesting to note that the present-day standardized treatment of diarrhea closely follows the principles established by this early study. The following findings together with comments drawn therefrom are presented:

TABLE II. TOTAL DAILY EXCRETION IN DIARRHEAL STOOLS

	Normal Stools	Loose	Very Loose
Water (c.c.)	35.6	133	293 *
Dried Matter (gms.)	8.7	12.9	21.1
Fat-total	3.1	4.0	7.9
Protein	2.2	3.5	5.5
Ash-total	2.1	2.7	3.9*

Holt, Courtney and Fales

TABLE III. PERCENTAGE OF FOOD INTAKE LOST IN STOOLS IN DIARRHEA

	Normal Stools	Loose	Very Loose
Fat	12.4	23.1	40.5*
Protein	7.7	14.9	25.2*
Carbohydrate		is either absorbed or broken down by fermentation	
Total Ash	40.0	46.6	84.3*

Holt, Courtney and Fales

TABLE IV. ASH CONTENT OF STOOLS IN DIARRHEA (IN PERCENTAGE)

		Normal Stools	Loose	Very Loose
Total Ash	24.8	21.0	18.7	
Calcium	47.0	42.3	27.4	
Magnesium	4.4	4.0	4.0	
Phosphate	29.1	27.3	19.7	
Chloride	1.0	5.6	9.2*	9 times normal
Sodium	1.9	6.6	11.9*	6 times normal
Potassium	8.3	14.2	27.6	3½ times normal

Holt, Courtney and Fales

Fat.—In the normal stool, loss of fat averaged 12 per cent of the intake, but in very loose stools, reached 40 per cent, showing that in severe diarrhea tolerance to fat is poor. Hence the rationale of low fat feeding in treatment of diarrhea.

Protein.—In the normal stool loss of protein was but 7 per cent of intake and in the very loose stool reached 25 per cent, showing a rather remarkable retention of protein as compared with fat. Hence the rationale of high protein low fat diets in the treatment of diarrhea.

Carbohydrates.—Starches and sugars did not appear as such in the stools. Evidently, they are either absorbed or broken down by fermentation. Carbohydrates are helpful because of their prompt oxidation and ability to combat ketosis. In the presence of diarrhea, however, tolerance for sugar has limitations, for an excess of fermental acids tends to increase the diarrhea. Rational treatment would seem to call for use of carbohydrates in the feeding of diarrheal cases, but preferably those carbohydrates which are slow in breaking down to the glucose level. This is important since fermentation does not take place until the carbohydrate has been broken down to glucose. Many years

ago, physicians learned the value of using various starches as barley and rice gruels as diluents in formulas for infants suffering from diarrhea. While almost everyone is willing to agree that the diarrhea case should have sugar in some form added to the formula, there seems to be considerable variance of opinion as to whether or not some sugars are better tolerated and less lossening than others. Personal experience has shown that sugars with relatively high maltose content as Karo and Mellins Food are definitely more laxative than sugars running high in dextrin as dextri maltose and dexin, so the type of sugar to be used becomes a definite part of the therapeutic program. More important still is the appreciation that increases in the amount of carbohydrate must be made slowly in order to avoid lightning up the diarrheal process by excess fermentation.

Ash.—In the normal stool, 40 per cent of the ash intake is lost in the stool. In very loose stools loss of ash reaches 84 per cent and it is this loss of mineral substance from the body that in the majority of instances explains the accompanying acidosis. Loss of sodium is of particular significance as a cause of the acidosis, and it is essential that sodium be administered promptly in some form, either by adding salt to food or drink or by use of saline parenterally. In rare instances, sodium bicarbonate intravenously may deserve consideration. When the diarrhea case begins to vomit, another factor enters the picture, because vomiting results in loss of chloride via the gastric juice.

Thus we have seen that these early metabolic studies on diarrheal cases, in addition to tremendous water loss, showed negative balances for chlorides, sodium, and potassium. It is by the intelligent use of parenteral fluids in correcting dehydration and restoring electrolyte balance that modern pediatrics has been able to accomplish the great reduction in the death rate from diarrheal disease. Normal saline or Ringers solution and 5 or 10 per cent glucose will supply the needed sodium and chloride, and the glucose will correct ketosis and combat toxemia through protection of the liver and stimulation of kidney function.

Treatment Fundamentals

In recent years less attention has been focussed on attempting to classify the type of diarrhea as to its fermental or putrefactive nature, but rather to deal with diarrhea as a state of derangement of the intestinal tube in which the body loses tremendous amounts of water, fats, proteins and minerals. The basis of treatment therefore will consist in correcting dehydration, restoring electrolytes and providing a type of food which will be non-irritating to the bowel and capable of absorption. Over the years, many plans of therapy have been suggested and used in the treatment of diarrhea but it now seems that accepted methods of treatment have become pretty well standardized. Routine use of cathartics such as calomel and castor oil to "clean out the bowel" has been almost entirely discontinued for the reason that an inflamed intestine should not be subjected to further irritation. Instead of catharsis, the bowel is given rest by withholding food for at least twenty-four hours, allowing only weak tea or sterile water ad lib. It is seldom necessary to withhold food for longer than twenty-four hours, but until the infant is able to take and retain clear fluids there is no point in offering food. During the short starvation period it is essential that the body losses of fluids and electrolytes be replaced so that nature will have some building stones to work with. If the child appears acutely ill, immediate hospitalization will be the wiser course so that saline-glucose administration may be instituted before it is too late. But suppose it is not practical to hospitalize the child. How can these corrective building stones be supplied at home? At the risk of repetition, permit me to review some material with which you are no doubt familiar. I refer to a mixture referred to in some teaching centers as S.O.G. This preparation is palatable when cold and supplies the needed elements. It is offered in teaspoonful doses at first, gradually increasing the amounts as tolerated.

Orange juice (strained)	4 ounces
Water	2 ounces
Karo or strained honey	1 tablespoon
Salt	¼ level teaspoon
Ice cube (if desired)	

Potassium.—Rather recently Darrow[3] has stressed the importance of incorporating potassium in the repair solutions used in the treatment of severe diarrhea. It is known that cases of diarrhea suffer loss of intracellular potassium, the potassium within the cells being replaced by sodium. But if potassium is made available, it will gradually reenter the cell. Darrow's series of cases showed a definite lowering of mortality when potassium was

added to the repair solution. Actually, the demonstration of loss of potassium along with sodium and chloride is not new. As early as 1850 Schmidt showed that diarrhea caused marked losses of water, sodium, chloride and potassium and we have already referred to the studies made by Holt in 1914. However, fear of heart block retarded acceptance of potassium as a therapeutic agent.[4] Darrow's solution* is reported suitable for subcutaneous injection and apparently may be given with safety provided kidney function is adequate, if it is given slowly and in proper dosage. In case the physician has some reservations regarding the parenteral use of potassium, Darrow's solution may be given orally, by diluting it with two parts of 5 per cent glucose solution.

Medication and drugs are of little importance in the treatment of diarrhea. Bismuth is not recommended because it has not proven to be effective and the resulting discoloration of the stool may be misleading. Until the discovery of sulfonamides, there were no intestinal antiseptics of value. Regardless of whether the diarrhea is enteral or parenteral, so far as sulfonamide therapy is concerned, sulfadiazine is probably the drug of choice. Kaopectate is acceptable and paregoric in drop doses may be used to slow up peristalsis and ease cramps. Aureomycin and chloromycetin await further evaluation.

Blood Transfusion.—The dehydration and shock incident to severe diarrhea is best treated by saline, glucose, and blood. Blood counts on diarrheal infants give false information due to the hemoconcentration and are not to be depended upon. In most instances it seems advisable to correct the dehydration first and then follow with small transfusions of blood.

Milk Formulas in Diarrhea

Boiled Skim Milk.—Skim milk cooked ten or fifteen minutes in a double boiler furnishes a low fat, easily digested food and may be considered as sound dietary treatment for the average case of diarrhea. As the diarrhea comes under control and one desires to add a moderate amount of fat to the diet, it has been convenient to shift to Dryco or Alacta formula. These dry milk products are produced following removal of one-half of the butter fat, i.e., one-half skimmed milk.

Diluted Formula.—Mild diarrheas are usually well treated by merely advising the mother to dilute the formula one-half with sterile water, gradually returning to the original formula as stools improve.

Protein Milk Formula.—This food devised by Finkelstein is based on the idea of supplying a food containing a moderately low fat but with a protein content relatively high as compared with sugar. In later years however, it was found advantageous to add small amounts of additional sugar. Protein milk has been successfully used in this country for thirty years, and while its popularity seems to be on the wane, it is still regarded by many as the most effective formula in the treatment of severe infantile diarrhea. It is available in powdered form and is generally used in the strength of one-third as many level packed tablespoons as ounces of sterile water or thin cereal gruel. Since one level packed tablespoon of protein milk has the same caloric value as one ounce of evaporated milk, it is easy to gradually replace the protein milk with evaporated milk, as improvement occurs. As stated before, it is common practice to add gradually increasing amounts of a dextrin sugar to the protein milk formula. Theoretically, this brings one back to a formula differing little from a moderately low-fat milk. Just why the protein milk formula works so well is difficult to explain. Perhaps it had best be accepted as a valuable "trick formula."

Normal Feeding Regimen in Diarrhea.—Some twenty years ago, Park pointed out the desirability of using concentrated formulas in diarrhea cases, calling attention to the sick infant being better able to handle a reasonable number of calories supplied in concentrated form, water being offered between feedings. More recently, Chung[1] created considerable interest in pediatric circles by advocating no change in the composition of the infant's formula merely because of diarrheal stools. He pointed out that the intestinal condition in dysentery is similar to that in typhoid fever and that a well-balanced diet adequate in calories will lead to better absorption and shorten the course of the disease. While this reasoning has not been generally accepted by pediatricians, it does emphasize the point that infants and children should not for long periods of time be kept on one-sided or deficient diets.

*Darrow's solution is prepared by adding 40 c.c. molar sodium lactate, 2 gm. potassium chloride and 3 gm. sodium chloride to 710 c.c. of water.

Pectin Agar Dextri-Maltose Feedings.—This interesting preparation makes possible the preparation of another "trick formula" which gives excellent results in certain cases. It is particularly applicable to the chronic diarrhea case which has not responded to skim milk or protein milk feedings. It was pointed out by Howard and Tompkins[6] that several factors are responsible for the favorable effects following use of this preparation. Mothers are familiar with the use of pectin in making fruit juices jell, and with the ability of agar to hold up water and form a jelly-like mass. When these substances combined with dextri-maltose are cooked into a definite amount of whole milk, there results a formula of high caloric content which is usually well tolerated. It is interesting to observe that some diarrheal infants will tolerate from two to three times as much carbohydrate in this form as one would dare to feed a normal infant. Perhaps the pectin agar jel holds both water and sugar in suspension until absorption takes place.

It is only by experience that one can learn how best to use this type of feeding but it gives promise of becoming a most excellent adjunt to our treatment methods. As a general rule, it is possible to add from 10 to 15 level tablespoons of pectin-agar-dextri-maltose to the milk dilution formula—cooking same for ten minutes in a double boiler before bottling. Following storage in the ice box this formula becomes semi-solid but is readily liquified by placing bottle in hot water and shaking. It is fed by using nipples with an enlarged hole. It is of particular value in the management of those infants who, in spite of their diarrhea are manifesting hunger and who need a food of high caloric value. Such infants may have been most unhappy on the skim milk or protein milk formula, but are seen to relax and show satisfaction following a few feedings of the pectin agar formula. If the food is to be successful, thickening of the stools will usually be noted within twenty-four to forty-eight hours.

It is reasonable to believe that the pectin-agar combination may so modify the physical properties of milk as to make possible oral feedings of adequate caloric value earlier in the disease, and thereby promote retention of needed elements. While there is no single type of feeding applicable to all cases of diarrhea, a considerable experience with this little used type of feeding leads me to believe that it is deserving of much wider usage in the treatment of those diarrheas manifesting loose gushing stools but without nausea or severe constitutional symptoms. Frequently such children are actually hungry and are most appreciative of the satisfying formula supplied by the pectin agar mixture. The following formulas seem to meet certain special indications, the thick custard being used for older children and two types of formulas for bottle fed infants.

1. Pectin Agar Dextri-Maltose Custard
   Whole milk 16 ounces
   P.A.D.M. 15 level tablespoons
   Cocoa 2 tablespoons
   Cook 10 minutes in double boiler. Divide into six custard cups.

2. Pectin Agar Formula (standard)
   Whole milk 24 ounces
   P.A.D.M. 12 level tablespoons
   Cook 10 minutes in double boiler.
   Put 4 ounces in each of six bottles.
   One ounce supplies 35 calories.

3. Pectin Agar Formula (Dilute)
   Whole milk 16 ounces
   Water 8 ounces
   P.A.D.M. 8 level tablespoons
   Cook 10 minutes in double boiler.
   Put 4 ounces in each of six bottles.
   One ounce supplies 21 calories.

The following case records illustrate some of the diarrheal conditions in which the pectin-agar-dextri-maltose formula has proven to be of value.

G.W.	Age 4 weeks
7/26/49	Breast feedings—intestinal cramps (seven to nine loose stools daily). One bottle feeding daily of pectin-agar formula: Milk 4 oz. PADM 2 Tbsp.
8/23/49	Response within three or four days. Stools reduced to two or three daily.
S.O.	Age 6 weeks
10/25/49	Diarrhea past two weeks. Improved on boiled skim milk. Recurrence on increase of formula. Baby hungry—taking 5 or 6 oz. feedings. WN 20, SW 10, PADM 10 Tbsp.
10/26/49	4 stools—spongy but well formed. Satisfied—sleeps better.
10/27/49	3 stools. More contented. Gained 6 oz.
10/28/49	2 stools—normal.

L.M. Age 6 months

Past 4 mouths on EM 13, SW 22, Dm 1 oz.

7/5/49 Severe diarrhea. No fever.
Boiled skim milk. Paregoric.

7/11/49 No improvement.
Watery stools continue.
Hunger—no satisfaction.
Pectin agar formula:
WM 24
SW 12
PADM 12 Tbsp.

7/26/49 Formed stools in 3 to 4 days.
Homog. milk (boiled).

K.M. Age 27 months

8/22/49 Diarrhea one week.
Vomiting two days.
Prostration.
Pectin agar custard:
Milk 1 pint
PADM 15 Tbsp.
Vanilla
Custard cups.

8/23/49 Improvement.

8/25/49 Stools reduced to two or three daily.

9/1/49 Add meat—custard—egg—jello—cereals.

M.E.Q. Age 5 years

8/11/49 Diarrhea each summer—seasonal fruits.
Loss of bowel control.
Pectin agar custard:
Milk 1 pint
PADM 15 Tbsp.
Custard cups.

8/18/49 Formed stools.
No more accidents.

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MSMS

Facial paralysis is noted in one-third of patients with salivary gland cancer, but in only one per cent of similar benign tumors.

• • •

Unilateral enlargement of cervical nodes is often due to metastatic cancer which must be ruled out before any other diagnosis is considered.

• • •

A great majority of all tumors of the salivary glands arise in the parotids; a few are found in the submaxillary gland. The sublingual glands are rarely involved.

• • •

Malignant salivary tumors are usually fixed to the skin or underlying tissues. Benign tumors are freely movable and have well developed capsules.

Differentiation of Anorexia Nervosa and Pituitary Cachexia

Case Report

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ANOREXIA NERVOSA and pituitary cachexia are clinical syndromes which often present great difficulty in differential diagnosis, largely due to the many similarities between the two entities. Because it presents the problem of differentiation rather well and has some unusual features, the following case study is presented.

Miss C. K., aged thirty-one, white, entered Harper Hospital on April 8, 1949, with chief complaints of progressive weight loss for thirteen years, muscle weakness, severe loss of appetite, and amenorrhea for five years. Here temperature was 35.8° C.; pulse 64.

Her story dates from the time she was about fourteen. At that time she was told by an acquaintance that she probably had a goiter and was advised to go to a doctor. She failed to do so until two years later, however, when difficulty in swallowing and speaking and marked shortness of breath forced her to submit to thyroidectomy. This operation was performed in 1934. During the following year she felt so well that she gained weight, reaching 180 pounds at one time. Because of her obesity, she was goaded so much by her associates that she went on a severe reducing diet, eating "practically nothing" and resorting to commercial reducing preparations. In one year, she lost 100 pounds of weight. By then she was unable to eat more than small amounts of food at each sitting. This anorexia persisted until the time of hospitalization. Five years prior to admission her sweetheart was killed in combat. This shock further decreased her appetite, she lost even more weight, and her muscular strength ebbed. She began to have periods of depression and mental aberrations. Her menses ceased at the time of the mental trauma mentioned above and did not recur at any time during the fire years prior to hospitalization. She became severely constipated, her skin dry and dark in color. She noticed an increasing tendency to bruise easily, "ringing in the ears," numbness and tingling of the extremities. Her ability to remember and to reason was markedly retarded. She noticed persistent marked thirst, increased frequency of urination, and moderate nocturia.

Her psychiatric history is of great interest. Upon ad-

From Harper Hospital, Detroit, Michigan.

mission, she was reluctant to divulge accurate information, stating that she had had "a very normal life," with no frustrations or resentment on her part, no adolescent problems, no overindulgence or neglect by her family. However, her mother stated that financially the family had always had a struggle. The patient was the second of four children—one sister and two brothers—all well, one employed at a local plant, another a graduate engineer, one a college student. All of them were jealous of the patient because of her continual demand for special attention, but all of them were indulgent toward her. She had used her ill health as a weapon to obtain her desires. She left school in the tenth grade, took a business course, worked as a stenographer for a short time, then quit her job and remained at home most of the time working around the house. She became progressively more introverted, seemed to have no interests aside from cooking and house-cleaning. She had the one romantic interest mentioned previously; her sweetheart's death, as noted, was a severe blow to her. Finally, she was characterized by her family as "selfish and demanding."

Her medical history was otherwise negative.

Family History.—The patient's father died of cirrhosis of the liver at fifty-three of age. Her mother, two sisters, and a brother were all alive and in good health. There was no family history of diabetes, muscular dystrophies or atrophies, goiter, or other metabolic or skeletomuscular disease.

Physical Examination.—The patient was a fairly well-developed, markedly asthenic, emaciated, white woman with marked genealized muscular atrophy. She had difficulty in moving her jaws in talking, and expended great effort in writing her name, in raising her arms, flexing and extending her wrists, elbows, and shoulders. She was barely able to move her legs, but could accomplish all movements with difficulty. Tenderness over the muscles of her extremities was elicited.

Head: eyes—bilateral exophthalmos (lid lag and ball lag present; convergence normal); mouth—dental prosthesis present.

Neck: sternocleidomastoid muscles markedly atrophic.

Chest: breasts atrophic. Wasting of intercostal muscles.

Heart: rate 70; regular rhythm. No murmurs or arrhythmias.

Abdomen: scaphoid type. Pubic hair sparse.

Extremities: generalized muscular atrophy. Marked ecchymoses and trophic change over tibial areas.

Neurological: (1) All deep reflexes decreased; abdominal reflexes present. (2) Slowness and marked weakness of all skeletal muscle movements; all movements accomplished weakly but without delay. (3) Parasthesia of both legs and arms; deep pain sensation absent. (4) Corneal and pharyngeal reflexes absent.

Differential Diagnosis.—(1) Pituitary cachexia (Simmond's disease) following pituitary hyperfunction stage; (2) anorexia nervosa.

Because the available history at first was quite sketchy, we believed that this patient had pituitary cachexia, perhaps as a pituitary exhaustion stage following a polyglandular overactivity involving pituitary and thyroid glands. In favor of this diagnosis were the classical signs of extreme emaciation, profound weakness and asthenia, the appearance of premature aging, dryness and wrinkling of the skin, scantiness of axilary and pubic hair, atrophy of breasts and genitalia, loss of libido, amenorrhea, mental apathy, and subnormal temperature. However, anorexia nervosa with severe malnutrition was a strong possibility and could not be ruled out clinically.

Laboratory Findings.—FBS: 98 mg. per cent; NPN: 67.6 mg. per cent; Kahn: negative; Urine: Sp.G. 1.001; Albumin trace; RBC: 4.27 M.; Hemoglobin 11.9 gm. 77 per cent; WBC: 13,300; Diff.: Pmn 68 per cent; M 3, L 28, E 1; BMR: +20 on April 9, 1949; —9 on April 26.

Blood chemistry was as follows:

Calcium	6.0 mg. %	4-11-49	(normal 9.0-11.5 mg. %)
Phosphorus	7.9 mg. %	4-11-49	(normal 3.0-4.5 mg. %)
	6.1 mg. %	4-27-49	
Alk. phosphatase	2.4 mg. %	4-11-49	(normal to 13 mg. %)
FBS	178 mg. %	4-20-49	
Chlorides	456 mg. % (as NaCl)	4-11-49	
Cholesterol	170 mg. %	Cholesterol Esters 113 (66%) 4-11-49	
Potassium	20.2 mg. %	4-11-49	
	22 mg. %	4-27-49	
Iodide	1.35 %	Total	4-11-49
	.50 %	Org.	
	.85%	Inorg.	
Total protein	5.89 mg. %		4-15-49
Albumen	3.86 mg. %		
Globulin	2.03 mg. %		
A/G Ratio—1.9/1			
NPN	58 mg. %		4-13-49
	32 mg. %		4-28-49

Glucose tolerance was charted thus:

	Blood glucose	*Urine*	*Date*
Fasting	.107	Neg.	4-9-49
¾ hr.	.191	Neg.	
1½ hr.	.318	Neg.	
2½ hr.	.261	Neg.	
3½ hr.	.095	Neg.	
5 hr.	.080	Neg.	
Fasting	.107	Neg.	4-27-49
½ hr.	.194	Neg.	
1 hr.	.308	Tr.	
2 hr.	.302	2+	
3 hr.	.141	1+	

Modified Mosenthal:

	Vol.	*Sp. G.*	
11 P.M.	192	1.005	4-13-49 4-14-49
2 A.M.	140	1.005	
5 A.M.	270	1.005	
7 A.M.	88	1.004	

PSP: April 13, 1949—Poor co-operation. Patient excreted only a twelve-minute specimen; this contained no dye and was therefore abnormal. No other specimens were obtained.

EEG: April 16, 1949—Unreliable because of patient's instability, but appears essentially negative.

EKG: April 14, 1949—P-R. 24. P large and peaked in standard leads II and III, inverted in IV. Delayed A-V conduction.

17 Ketosteroids: 3.3 mg./24 hours (5.15 mg. normal), April 11.

FSH: Less than 5 mouse units/24 hours (5-50 units normal), April 11, 1949.

11 Oxy-corticosteroids: 2.07 mg./24 hours (1-1.6 mg. normal), April 11, 1949.

X-rays: Skull, lumbosacral spine, and pelvis essentially negative, April 15, 1949.

Course in Hospital.—No therapy other than barbiturates for sedation was used until the above studies were well on the way to completion. The abnormally high glucose tolerance curve was the first indication that we were not dealing with pituitary cachexia. This led to further questioning of the family, and a more accurate psychiatric history was finally obtained.

Other factors also entered into consideration at this point. Her basal metabolic rate was +20 on one occasion, —9 on another, and this was certainly not typical of Simmond's disease, in which the rate is generally —25 to —30. The low serum chlorides, depressed serum proteins, low calcium level, and decreased glucose tolerance test as a group were best explained on the basis of inanition.[1,4] The dilution-concentration test, PSP excretion test, and elevated NPN were probably the result of renal dysfunction secondary to dehydration. The fact that the 17-ketosteroids were low did not rule out anorexia nervosa, inasmuch as they are low in starvation as well as in decreased adrenal cortex function.[3,5]

It was concluded that we had a case of anorexia nervosa. The subsequent course in the hospital rather dramatically proved our point. On her improved nutritional regimen, she gained strength enough by April 12 to get out of bed and walk. On April 14, she became markedly drowsy and lethargic and could scarcely be aroused. Benzedrine 10 mg. was administered with no effect. By April 15, she had lapsed into a rather typical schizophrenic episode of the catatonic type. Her talk was irresponsible, she had lapses of memory, and at times sat with frozen facies and would not respond to questioning. She was started at this point on testosterone proprionate 25 mg. I.M. daily in an attempt to stimulate elaboration of APH, for the various laboratory data demonstrated, we felt, a general endocrinological hypofunction. Protamine zinc insulin 15 U, multivitamins and I.M. Betalin were given daily. On April 16, she lapsed into an acute schizophrenic episode and began to void and defecate involuntarily. At this point institutionalization was seriously considered. However, she showed some evidence of improvement, so she was retained in the hospital. On April 18, methyl testosterone 20 mg. daily was instituted to reinforce the I.M. preparation. By April 19, she was eating hungrily and showing signs of co-operation. On April 20, she dramatically became lucid, very co-operative, and aside from one or two mildly depressed episodes showed no residua of her schizophrenia from that time until the date of discharge. She ate voraciously at times, had vaginal flow for half a day on April 28, and was to all intents and purposes a normal individual. Her weight record was of interest. By April 24, she reached a weight of 97.5 pounds, then dropped to 90 pounds two days later. This gain and loss were probably due to edema resulting from increased water intake, with subsequent loss due to reshifting of water balance.[2] She was discharged on May 1 in good spirits, weighing 93 pounds, a weight gain of 16 pounds since admission.

Comment.—We present this case as having unusual interest for several reasons:

First, the patient appeared at the outset to have most of the clinical features of Simmond's disease. Subsequent studies revealed a more positive psychogenic background for anorexia nervosa; laboratory studies, especially the decreased glucose tolerance and ± BMR, were positive evidence against pituitary atrophy; finally, her course in the hospital was a fairly typical recovery from starvation.

However, we feel that there is evidence in this case of generalized endocrine atrophy; some degree of hypopituitarism as evidenced by the clinical picture and low FSH; possible hypoparathyroidism as indicated by the low calcium, high phosphorus readings; hypo-ovarianism as indicated by amenorrhea and loss of libido; some of the features of adrenal cortical atrophy such as hypotension and asthenia; low 17-ketosteroids and low serum chlorides. That starvation can cause endocrine atrophy in animals is well established.[6]

We offer as an interesting feature the fact that testosterone (combined intramuscular and oral) therapy seemed to be a helpful adjunct in this case, for within a few days following its inception, this patient changed from a markedly degenerate psychotic to a completely lucid individual with apparently normal judgment and reasoning ability—all without benefit of psychotherapy. Also, she regained her ability to menstruate, which was of some importance to her. We interpret this as possibly meaning that the testosterone stimulated the anterior pituitary gland, with a secondary effect on the ovaries. Also, it is possible that stimulation of the pituitary may have resulted in cerebral stimulation via the hypothalamus, causing apparent recovery from a degenerative schizophrenic psychosis.

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MSMS

In suspected neck malignancy, a search for the primary lesion should always precede any treatment. Surgery should be the final step.

The Treatment of Acute Otitis Media

By J. H. Maxwell, M.D.
Ann Arbor, Michigan

IN THIS period when potent chemical and biological agents have so greatly reduced the morbidity of acute otitis media, and have practically eliminated surgical procedures for acute suppurative processes in the temporal bone, one might question the need for further discussion of this subject.

Although there is much truth in the statement that the otologist's practice has become more medical than surgical, otology is still a surgical specialty and those who practice it whether as specialists or general practitioners must be surgically minded and prepared to make a surgical diagnosis in this field. The trained otologist with a large background of experience in temporal bone infections regards with considerable apprehension the present trends in the purely medical treatment of otitis media. There is a widespread attitude that all cases of acute otitis media, and I might even say all cases of earache, should be treated by the use of antibiotics and chemotherapeutic agents; that the membrana tympani should be allowed to rupture spontaneously if it will, and rarely if ever be incised; and that the resulting hearing impairment can be cured by the use of radium in the nasopharynx. It is because of this present trend in therapy that I wish to discuss the treatment of acute suppurative otitis media and acute otitis media with effusion.

Acute Suppurative Otitis Media

The diagnosis of acute suppurative otitis media presupposes the presence of pus in the middle ear. The classical symptoms and signs, including earache, fever, leukocytosis, impaired hearing, and a red, bulging drum membrane need not be discussed in detail for they are well known to all of you. Known to you also is the fact that there is considerable variation from this classical picture in many instances, depending upon the rapidity of development of the abscess, the bacteriology of the infection, and the alteration of virulence of the infecting organisms produced by inadequate chemotherapy in the early stages of inflammatory changes in the tympanic mucosa. Such variations may be evidenced by lack of fever and pain. The drum membrane may be yellow and bulging to varying degrees. In some instances, particularly in pneumococcal infections, the local subjective symptoms may remain minimal up to the time of extension of the process into the cranial cavity to produce sinus thrombosis, meningitis, or brain abscess. I repeat for emphasis that the diagnosis of acute suppurative otitis media presupposes the presence of pus in the middle ear. To arrive at such a diagnosis demands a careful examination of the ears, nose, and throat. The external canal must be free from all foreign material to allow inspection of the entire drum membrane. After such inspection, intelligent evaluation of abnormal findings must be made. Having arrived at a diagnosis of acute suppurative otitis media by deciding from the clinical examination that there is pus in the middle ear, the treatment required is obvious. Myringotomy is demanded! A surgical diagnosis has been made and there is an uncomprising demand for surgical treatment—NOW—not next week and not after a trial on chemotherapy.

Since it is not desirable or even possible at this time to attempt to discuss all phases of this subject, I should like to answer a few questions that have been asked of otologists on frequent occasions during the past several years.

Should early myringotomy be done in every case of otitis media?

The answer is decisively, No. Non-suppurative acute otitis media should be treated medically. A patient, more commonly a child, complaining of earache and demonstrating a bright red, perhaps retracted, drum membrane which may be the site of a small bleb does not need a myringotomy. Nor does he need necessarily one of the sulfonamides or penicillin. In the absence of severe infection in the upper air passages, the otitis media may subside spontaneously without suppuration. If there is present also an acute follicular tonsillitis, an acute exudative nasopharyngitis, or an acute suppurative sinusitis, sulfadiazine, penicillin or aureomycin will be indicated, and may serve to abort the otitis media. Such a patient should be kept under observation, however, and myringotomy accomplished as soon as there is evidence of pus in the middle ear which may be only a matter of a few hours.

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Why not let the drum membrane rupture by itself instead of incising it?

A statistical study made several years ago, before the advent of the sulfonamides, of over 1,500 cases of acute suppurative otitis media, demonstrated conclusively the following facts:

1. In the majority of instances (60 per cent) spontaneous perforation occurred after three days of symptoms. Thus, in building up pressure in the middle ear for more than three days, the increased opportunity for spread of infection to the mastoid is obvious. It was further shown that there is no tendency for a child's drum membrane to rupture earlier than an adult's.

2. When spontaneous perforation of the drum membrane does occur, the drainage is frequently inadequate. Furthermore, the later the spontaneous perforation, the less adequate the drainage as exemplified by the fact that in those patients experiencing spontaneous perforation after three days of symptoms, secondary myringotomy was demanded in nearly twice as many instances as in the group whose drum membranes ruptured before three days of symptoms.

3. Mastoiditis is less likely to develop in individuals who have the benefit of a myringotomy early in the course of an acute suppurative otitis media. In a group of 558 cases of acute suppurative otitis media proceeding to spontaneous recovery, 55 per cent had had early myringotomy. In 727 individuals with surgical mastoiditis, only 22 per cent had had the benefit of early myringotomy. Nearly half of the latter group had been permitted to proceed to spontaneous perforation of their tympanic membranes.

In general, it has been shown that the time and type of middle ear drainage in cases of acute suppurative otitis media are influential factors in determining the course of the disease.

Finally, in regard to this question, I would like to ask those individuals who oppose myringotomy if they have ever had an acute suppurative otitis media. If not, they should experience the excruciating pain that this disease may produce, then enjoy the relief afforded by surgical drainage. In all probability they would then be willing to resort to this simple surgical procedure to relieve the pain of a suffering patient.

Are there not some dangers associated with myringotomy due to the likelihood of introducing infection into the middle ear, and of injuring the contents of the tympanum?

There are theoretical dangers in this procedure but they are greatly outweighed by the dangers of leaving pus under pressure in the middle ear cavity.

First, in the absence of an external otitis there is little if any danger of introducing infection into the middle ear if a sterile myringotomy knife is used. The drum membrane does not need to be prepared by using a bacteriocidal solution.

Second, with reasonable care and gentleness, there is practically no danger of damaging the middle ear contents by myringotomy. Individuals retain normal hearing after repeated myringotomies providing that a necrotizing infection does not destroy portions of the drum membrane or the tympanic mucosa.

Why not use one of the sulfonamides or an antibiotic routinely in all cases of acute otitis media, both non-suppurative and suppurative, since experience has shown that most of them will resolve without drainage under this regimen?

There are several aspects to this question which should be considered individually.

In the first place, it is generally conceded that such medical therapy is never a substitute for an indicated surgical operation. Many infections in the ear and elsewhere in the body can be aborted by properly chosen chemical and biologic preparations and thus cured before the indications for surgical drainage develop. After surgical drainage, such medical therapy may be most valuable in decreasing the morbidity and in preventing complications which might prove fatal.

In the second place, not all cases of acute otitis media need such medical therapy. The sulfonamides and antibiotics are not perfectly innocuous substances. The undesirable side effects and the deleterious toxic and allergic reactions are well known. These agents are far too valuable to waste by indiscriminate use and thus chance a sensitization reaction which may preclude the possibility of using the drug during some future illness when it is needed desperately. Experience in the presulfa days demonstrated that 95 to 97 per cent of cases of acute suppurative otitis media resolved spontaneously without mastoid surgery. Certainly less than half of these cases had a stormy or septic

course in recovery. Thus it may be estimated that there is a large group of even the suppurative cases that does not need chemotherapy.

Finally, conceding that, even in instances when pus is present in the middle ear, the infection may subside and the pus may be absorbed, there are two very real dangers in depending on chemotherapy or the use of antibiotics to accomplish a cure unaided by surgical drainage. The first of these is the danger of producing a greatly attenuated smoldering infection which will eventuate in the insidious development of an intracranial complication. This is not a theoretical possibility but a reality encountered by otologists with sufficient frequency to cause them real concern. The second danger is that of permanently impaired hearing produced by mucosal thickening and even scar tissue after the absorption of pus. An undrained abscess in any body cavity will produce such sequelae. In nonsuppurative cases of otitis media aborted by medical therapy, a serous effusion into the middle ear may occur and produce hearing impairment which may go unnoticed for long periods in children not subjected to careful follow-up examinations.

When should the sulfonamides and antibiotic agents be used in otitis media?

I know of no reliable rule of thumb to govern the administration of these drugs. Each individual case of otitis media must be considered on its own merits and evaluated after careful clinical examination of the patient. It is, of course, most important that the physician know from the appearance of the tympanic membrane what pathological changes are present in the middle ear and what further changes are likely to take place based on the entire clinical picture presented by the patient and on the appearance of the mucous membrane of the nose and throat. From information thus obtained he may decide that one of the sulfonamides or antibiotics is indicated to treat the upper respiratory infection and abort the otitis media.

If it is determined that pus is in the middle ear this should be drained surgically and the decision made regarding adjuvant medical treatment. If the patient is febrile and has a marked leukocytosis and if from the character and quantity of the exudate in the middle ear, it is obvious that there is a virulent infection present, sulfadiazine, penicillin or aureomycin, alone or in combination, may well be administered immediately. If this is done, the dosage should be adequate, the drugs continued until the infection has subsided completely, and the patient kept under observation. A patient is much safer to be deprived of these drugs than he is to have one or two shots of penicillin or a few sulfa pills and told to return later if he is in trouble.

If, after examination, it is decided to do a myringotomy, and it is judged from the character of the discharge and general appearance of the patient that the infection is of low grade, and being resisted well by the patient, chemotherapy need not be given immediately. The patient should be reexamined frequently enough to determine the course of the infection. If it subsides in a few days, nothing further is needed; but if there are signs of extending infection or increased virulence, it will be obvious within two to four days at which time the drugs may be started and given in adequate dosage and continued until resolution of the infection is complete.

It is particularly dangerous to use such therapy timidly and interruptedly. Repeated recrudescences demanding reinstatement of medical regimen mean a continued focus of infection either in the nasopharynx or in the mastoid.

In conclusion, it should be reiterated that the sulfonamides and antibiotics have been of tremendous value in decreasing the morbidity of acute suppurations in the middle ear and in nearly eliminating complications due to extension of infection beyond the boundaries of the middle ear cavity. Their place in the physician's armamentarium is definite and their value when properly used has been proven. They are not substitutes for an indicated surgical operation nor are they substitutes for a painstaking clinical examination. They should be selected with care, administered judiciously, and treated with the respect accorded narcotics and potential poisons.

Otitis Media with Effusion

A second but closely allied condition which I wish to discuss very briefly at this time since it was mentioned earlier, is otitis media with effusion. This, as Dr. Gordon Hoople has stated, is a "challenge to otolaryngology." It is often neglected because of faulty diagnosis, and commonly mistreated. It is a frequent cause of hearing impairment in children, and one which lends itself to remedial therapy. It may be the result of barotrauma, infection, or possibly vasospasm. There is

increasing evidence that an early suppurative otitis media aborted by chemotherapy may result in an effusion of clear amber serum into the middle ear. Without earache, fever, or general reactive symptoms, the patient is apparently cured of his infection. The adult will complain of a feeling of fullness in his ears and hearing impairment, but the young child is not likely to complain of these symptoms. If one ear only is involved, the parents may not notice the impaired hearing but it is likely that there will be some decline in the quality of the child's school work.

Examination will give evidence of a conductive type of hearing loss. The drum membrane may appear to be normal on casual inspection but on more careful study it will be seen to have an amber color due to the serum behind it. Bubbles, or a meniscus of fluid may be visible. In an adult, eustachian catheterization and inflation will produce a rather characteristic "chug" as heard through the auscultation tube rather than the usual sound of air flowing through the eustachian tube. Such inflation may produce bubbles in the fluid of the middle ear which can be visualized through the tympanic membrane.

If the process is new and acute it should be given an opportunity to subside spontaneously. In subacute cases in adults, paracentesis of the tympanic membrane with point suction is indicated. Repetition of this treatment may be required at intervals if the fluid reaccumulates. In children who have the condition in the subacute stage, that is, clear fluid that remains in the middle ear for two or three weeks after the causative upper respiratory infection has subsided, the problem is slightly different. If there is hypertrophied adenoid tissue in the nasopharynx, it should be removed. The adenoidectomy must be well done and particular effort made to remove lymphoid tissue from the fossae of Rosemuller. This alone frequently effects a cure. If, however, fluid is still present after a week or two, it should be drained by the method described above.

A discussion such as this inevitably leads to the question which otologists are endeavoring earnestly at this time to answer; namely, "What place have the nasopharyngeal radium applicators in the treatment of middle ear disease?" This is a controversial subject on which authorities differ. Irradiation of hypertrophied lymphoid tissue in the nasopharynx is a form of treatment which probably has a place in the practice of otology. Frankly, however, I am not certain just what this place is. No one has yet shown in sequential pathological sections the precise effects of radium upon the nasopharyngeal lymphoid tissue. In my own experience, I have been unable to observe any gross changes in the appearance of the lymphoid tissue in the nasopharynx two months after radium has been used. There is at least one authoritative radiologist who maintains that the now popular monel metal applicators are a menace to the health of the physician who handles them and to the nurse who assists him.

In my opinion, this form of therapy has been a dangerous addition to the otologist's armamentarium, and one which has been abused in a manner comparable to turbinectomy and antrum puncture. I say this advisedly, for I have seen patients suffering from chronic suppurative otitis media, adhesive otitis, otosclerosis, and even nerve deafness who have had radium used in their nasopharynges. Children suffering from recurring attacks of acute otitis media after adenoid and tonsil operations have been advised to have this form of treatment when all that was needed was removal of a large mass of adenoids. These may have been recurrent or as is often the case left behind at the original operation.

If irradiation of hypertrophied nasopharyngeal lymphoid tissue has a place in the practice of otology, this place is limited, and positive indications for its use are rare. Little can be accomplished from its use in adults. In children, a thorough and carefully performed adenoidectomy will accomplish in most instances the results which radium is expected to produce.

The long-range effects of radium on the nasopharyngeal tissues are unknown. Its immediate effect must, of course, be destructive. Its possible deleterious late effects are considered with apprehension by many radiologists. If this form of treatment is to be employed at all, it should be only after thorough and careful consideration of the pathological changes present and thoughtful anticipation of objectives to be gained. A radium applicator is a dangerous instrument and one to be treated with respect.

MSMS

Leukoplakia is a warning, a warning far in advance of cancer.

. . .

Most moles should be left alone; they are harmless and will never become malignant.

The Hospital Management of Gall-Bladder Disease

By E. T. Thieme, M.D.

Ann Arbor, Michigan

THE PATIENT admitted to the hospital for the treatment of gall-bladder disease is either admitted for the study of and possibly for elective surgery for chronic cholecystitis, or for the emergency treatment of acute cholecystitis. There has been much written in the medical literature concerning both conditions; however, most of the controversy has been concerning the treatment of acute cholecystitis. Evaluating the methods of treatment of gall-bladder disease and the results obtained may be difficult when considered from the standpoint of a general surgeon in a small hospital. It is hoped from a short review of the pertinent literature and a study of a small series of cases from a general hospital, that an individualized method of treatment of gall-bladder disease can be formulated.

The fundamental knowledge of the etiology of cholecystic disease is still so inadequate that little can be said.[3] The concensus is that obstruction of the cystic duct is the inciting event for gall-bladder disease. The frequency of this obstruction and its duration are the factors which determine the course and severity of the disease. The cause of the original obstruction is poorly understood. The cause of obstruction evident at operation is most frequently stone. However, the cause of obstruction before stones are formed is not well understood. Reflux of pancreatic ferment, allergic manifestations, transient infection from the blood stream, lymph, liver or bowel have all been considered. However, once obstruction has occurred the alterations in gall bladder function and the bile are considered adequate explanation for stone formation. That recurrent cholecystitis may occur without stone formation has been shown many times, but also the poorest results from surgery are in noncalculus cholecystitis. Infection was long considered to be important in the etiology and in the continuation of gall-bladder disease. However, careful bacteriological studies by many investigators have shown that the bile and gall-bladder wall contain few organisms. In acute cholecystitis there is very little increase in the number of bacteria. Andrews[1] has shown that even so-called empyema of the gall bladder is not pus, but more often an emulsion of calcium carbonate or of amorphous crystalline cholesterol.[7] Feinblatt studying twenty empyemas of the gall bladder rarely found actual pus and obtained a negative culture in 60 per cent. Thus bacterial infection would seem to play a minor role.[5] Gangrene and perforation, occuring first in the fundus of the gall bladder, as they do, have been shown by Andrews, Saint[11] and others to be on a vascular basis. Edema at the base of the gall bladder restricts the blood supply to the most distant portion, the fundus. Acute cholecystitis and acute appendicitis have been considered similar and emergency operations advised for both. It is true that obstruction, most important in cholecystitis, is important in appendicitis; but there the similarity ceases. The appendix filled with bacteria and a relatively rigid organ often perforates freely into the peritoneal cavity. The gall bladder with few bacteria and being a relatively distensible organ, may perforate locally in as high as 10 per cent of the acute cases,[15] but perforates freely into the peritoneal cavity but rarely.

However, it is this danger and the hope of preventing gangrene and perforation during acute cholecystitis that has been the basis for the plea for early surgery in that condition. To properly assay the incidence and dangers of perforation one must determine what is meant by acute cholecystitis.[13] Wallace and Allen set a criterion of pain, tenderness, spasm and a palpable mass in the right upper quadrant, accompanied by a temperature elevation of 101 degrees or more and a white blood count of 12,000 or more.[12] Touroff, however, reported a special group of seventy-five who at operation had acute cholecystitis but who had clinically absent or minimal signs of the disease and were symptom free. Root and Priestly[10] noted two hundred forty-eight cases in whom the pathologist made the diagnosis of acute cholecystitis, the operating surgeon had suggested that diagnosis during the operation in 89 per cent but in none had the diagnosis been made by the clinician preoperatively. From this it can be seen that the diagnosis of acute cholecystitis can be made by the examining physician, the operating surgeon or the pathologist. That there may be lack of agreement seems at first a criticism of everyone but the path-

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ologist who of course has the final word. That is not so. The reasoning of Saint and the carefully worked out studies of Andrews do much to explain this lack of correlation between the clinical picture and the findings at operation. Obstruction of the cystic duct causes pain, as the obstruction continues, pain continues and the edema starts. Operation soon after the pain ceases may show a rather normal looking gall bladder as the edema may subside rapidly; or the edema may persist and the gall bladder at operation be large, red and thick walled. Despite the difference in the gross appearance of these gall bladders both patients had acute cholecystitis. The pathologist will report as little as he can politely. Andrews has shown that the thickening of the gall bladder is mainly edema in the serosa, most of which is lost during the process of fixation. The fact that the gall bladder and the fluid in it during acute cholecystitis may be sterile may help to explain the patient who walks into the office symptom free after an attack of acute cholecystitis, but in whom the surgeon at operation, days or weeks later, may find a very large red edematous gall bladder. This lack of correlation between the clinical findings and the severity of the pathology present must be taken as a warning of the dangers of acute cholecystitis and the ever-present possibility of gangrene and rupture despite few clinical symptoms. Surgery for chronic cholecystitis may now be done with a mortality of a fraction of 1 per cent. The care of acute cholecystitis formerly bearing a mortality varying from 10 to 30[6] per cent, depending on the cases selected for study, has been greatly improved. The mortality now ranges from 3[14] to 6 to 8 per cent, again depending on the selection of cases. When gangrene and perforation have occurred the mortality may range from 11 to 50 per cent.[4,8]

At St. Joseph's Mercy Hospital, Ann Arbor, which is a small general hospital, it has been the policy on one of the surgical services to treat the cases of acute cholecystitis expectantly and as individual problems. By acute cholecystitis is meant that patient with right upper quadrant pain severe enough to demand hospitalization. From the practical standpoint the physician called to see this patient faces the problem of treating acute cholecystitis at that time. Although the eventual outcome of any one case may not show the necessary elevation of temperature and white blood count, nor a right upper quadrant mass to meet the requirements set down for the diagnosis of acute cholecystitis by many authors, still at the time treatment is to be considered the problem is that of acute cholecystitis, and any study of the treatment of acute cholecystitis should include all such cases.

Having made the diagnosis of acute cholecystitis the patient is put at bed rest and given the necessary sedation. Demerol with its action on smooth muscle would seem preferable to morphine, but frequently relief is obtained only with the latter. The most important single factor in recovery is to put the gastro-intestinal tract at rest.[2] There is ample evidence to show that gall-bladder activity is under hormonal control, which in turn is dependent on food. Therefore, intravenous fluids are given and gastric-suction is used if there is any vomiting. This must be continued until pain has subsided and normal peristalsis is present as indicated by the passing of gas per rectum. Laboratory work and physical examinations must be done as indicated to follow the course of spasm, tenderness and the appearance of a mass. Hallendorf et al consider the appearance of a mass the sign of impending gangrene.[9] Saint repeats many times in his article that the appearance of a mass means increased intravesical pressure in the gall bladder and impending perforation. He therefore advises immediate operation when a mass is first felt. However in the cases presented here, the original right upper quadrant spasm was such as to hide a mass, and a mass developed later in only 25 per cent of the cases. The development of a mass was not used as an indication for emergency surgery. If there is progression of the disease clinically as evidenced by continued pain, nausea, increase in temperature and white blood count, emergency surgery is considered. This is the so-called fulminating cholecystitis which may end in disasterous perforation if surgery is not done in time. The great majority of cases will quiet down in two to three days. A few will continue on an unsatisfactory course requiring surgery, not of election. For those who improve rapidly a cholecystogram is ordered immediately. A normal cholecystogram at this time is strong evidence against gall-bladder disease. Two case histories will illustrate this point.

Case 1.—A 65-year-old woman was admitted during her third attack of right upper quadrant pain, nausea

and vomiting. On the two previous occasions a mass had been palpated in the right upper quadrant. Her temperature was 101.6 degrees and the white blood count was 12,000.

The symptoms quieted down within forty-eight hours but a mass persisted in the right upper quadrant. Cholecystogram showed a normal functioning gall bladder. Barium enema showed a carcinoma of the hepatic colon. The mass was a dilated loop of proximal bowel. Early surgery would have been indeed ill advised. Because of their proximity, disease of the hepatic colon and the gall bladder may be confused.

Case 2.—A 40-year-old housewife was admitted with severe right upper quadrant pain, nausea and vomiting. This was the most severe of many minor attacks. There was tenderness and spasm in the right upper quadrant but no mass. Her temperature was 100 degrees, white blood count 10,000. The symptoms quieted down within thirty-six hours and a cholecystogram done forty-eight hours after admission showed a normally functioning gall bladder. Other studies were inconclusive. Although no definite diagnosis was made, it was not felt that her gall bladder was at fault.

For those patients whose symptoms quiet down quickly surgery is offered after proper study. Surgery at this time may be difficult technically, and cholecystectomy, the operation of choice, is unwise if proper exposure of the duct system is impossible. Cholecystostomy must then be done.

In order to determine the incidence and to evaluate this method of the treatment of acute cholecystitis, the last one hundred consecutive cases of gall-bladder disease admitted to one of the surgical services at St. Joseph's Mercy Hospital, Ann Arbor, were studied.

TABLE I. ONE HUNDRED CONSECUTIVE ADMISSIONS FOR GALL-BLADDER DISEASE

	Cases	Deaths
Elective surgery for chronic disease	47	1
Acute cholecystitis, elective surgery	32	0
Acute cholecystitis, unoperated this hospitalization	21	2*
	100	3

*1 patient moribund on admission, no treatment
1 patient inaccurate diagnosis, improper treatment

Table I shows that 53 per cent were admitted for the treatment of what clinically was considered to be acute cholecystitis. Cases later shown not to be gall-bladder disease are not included. This is a much higher per cent than usually reported from clinics or hospital centers, where the incidence ranges from 10 to 25 per cent. There were three deaths in these one hundred cases. One patient entered moribund, dying twelve hours later. Autopsy showed a carcinoma of the gall bladder with metastases. The gall bladder had ruptured. A second case although under care in the hospital was never diagnosed until autopsy. At autopsy a ruptured gall bladder with supra, and infra hepatic and right lower quadrant abscesses were found. Her obesity is only a slight excuse for this missed diagnosis which also misdirected the treatment. The third patient dropped dead while shaving the morning that he was to have been discharged following an uneventful convalescence from a cholecystectomy done for chronic gall-bladder disease. Autopsy was not granted. Certainly these three patients died because of their gall-bladder disease, but one can hardly attribute their death to the type of treatment given but rather, in two of them, to the lack of treatment, as one patient being moribund was untreated, and the other patient lacking the proper diagnosis did not receive the proper treatment for gall-bladder disease.

TABLE II. CLINICAL COURSE OF FIFTY-ONE CASES TREATED FOR ACTIVE CHOLECYSTITIS

No. Cases	Course
25	3 days
4	Suffered exacerbation 3 days
11	subsided 5 days
3	more than 5 days
8	Continued an unsatisfactory course

Table II shows the clinical course of fifty-one cases treated for acute cholecystitis. Twenty-nine subsided within three days after admission to the hospital, but three suffered an exacerbation. Eleven additional cases required five days and three cases more than five days. Eight continued on an unsatisfactory course which required operation, not as an emergency but also not of election. The duration of the present attack before admission to the hospital was a definite factor in determining the hospital course. Only fifteen of the fifty-one cases were admitted within forty-eight hours of the onset, eleven of these subsided within three days.

Table III outlines the treatment of fifty-one cases of acute cholecystitis. Thirty-two cases were operated upon during this hospital stay. Cholecystectomy was done for all patients with the addition of common duct exploration for six. Of the nineteen who were not operated at this time, five were rejected after study as poor risks due to other diseases and eight refused operation. Three of the eight refusing operation were forced to return for surgery, two because of acute cholecystitis, and

TABLE III. TREATMENT OF FIFTY-ONE CASES OF ACUTE CHOLECYSTITIS

Cholecystectomy		26
Cholecystectomy with choledochotomy		6
		32
Not operated this hospitalization	19	
(1) Poor risk	5	
(2) Operation refused	8	
Forced to return for surgery		3
(3) Asked to return for surgery	6	
Returned for surgery		6
Total eventually operated upon		41

one because of acute intestinal obstruction due to a gall stone. Because of the seriousness of their illness six patients were asked to return after more complete recovery, for surgery at a later date. All six did deturn for cholecystectomy. Therefore, of the total of fifty-one cases treated for acute cholecystitis, thirty-two had cholecystectomy at the time of hospitalization studied and eight at a later date. An additional case underwent a resection of small bowel for gall stone ileus. Cholecystostomy was not required and there was no mortality. These operations were not considered emergencies. Therefore the time elapsing from onset of symptoms and from admission to the hospital, until operation was performed, depended not only on the clinical improvement but on the availability of the operating room. Acute perforation or gangrene was not found in any of the thirty-two cases of acute cholecystitis operated during this hospital stay. There was evidence of a previous local perforation in three of the six cases operated at a later date because of the severity of their illness. If any conclusion can be drawn from this small series of cases it would be that conservative treatment, appropriate studies and surgery, not as an emergency, can be carried out satisfactoritly in acute cholecystitis.

There is little of interest concerning the forty-seven cases of chronic cholecystitis admitted for elective surgery. Eight of these at operation had large red edematous gall bladders considered acute cholecystitis by the surgeon and pathologist but all were symptom free at the time of operation. In one case the local reaction was such as to make cholecystectomy inadvisable so cholecystostomy was done. Although many patients may successfully carry their gall stones through life into the autopsy statistics, it is the impression of the author that once cholecystitis and cholelithiasis have become evident clinically, cholecystectomy is the treatment of choice. No diet or combination of medicine will cure this disease. There were three cases of carcinoma of the gall bladder, all with stones, in this series of one hundred cases.

Summary

The lack of fundamental knowledge concerning the etiology of cholecystic disease is pointed out. Infection plays a minor role, edema with vascular restriction a major role in the production of cholecystitis and of its complications, gangrene and perforation. It is felt that each case of acute cholecystitis may be treated individually. The proper use of intravenous fluids, gastric suction and sedation will bring a prompt remission, allowing study of the individual problem with surgery during that hospitalization or if indicated by the severity of the illness, at a later date. A few may require surgery not of election for continuing cholecystitis.

A small series of one hundred consecutive admissions for gall-bladder disease was studied. The incidence of acute cholecystitis by clinical diagnosis was 53 per cent. Thirty-two of fifty-one cases treated were operated upon during this hospital stay. Nine others were operated upon later. There was no mortality in the group so treated. Evidence of a previous local perforation was found in three of the cases operated upon at a later admission.

There was one death among those operated for chronic cholecystitis. The incidence of carcinoma of the gall bladder was 3 per cent.

No conclusion can be drawn from so small a series of cases but it is felt that the method outlined for the treatment of acute cholecystitis may be continued.

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The Therapy of Non-Tuberculous Urinary Tract Infections

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WITHIN THE past ten years the physician has been armed with a battery of useful drugs for the management of urinary tract infections that have materially altered both the morbidity and mortality attending this common condition. This revolution in therapy has materialized in an amazingly short period of time and has all but delivered the practitioner from the feeling of despair which in the past was often associated with the diagnosis of resistant pyuria.

But in his enthusiasm over this sudden flood of antibiotic affluence the physician should not lose sight of certain long-established basic principles of diagnosis and therapy which remain unaltered by these new adjuncts to treatment; nor must he be guilty of the misuse of the new agents to the detriment of the patient.

The accurate diagnosis of existing infection is a logical preface to the discussion of the management of disease. Careful consideration of the method of collection and examination of the urine is imperative, for without acceptable standardized technique our conclusions and later treatment may be worthless.

In the male, a second glass voided specimen passed in a clean container is satisfactory, while in the female a catheterized specimen is mandatory, voided urine being worthless bacteriologically after passage over the secretions of the vaginal mucosa. The sample so obtained should be centrifuged immediately, the supernatant fluid examined for sugar and albumin, and the sediment subjected to microscopic examination. The routine use of methylene blue has proven a satisfactory staining technique, and may be supplemented by Gram stain and Zichl-Nielsen stain when indicated. The presence of pyuria, and the identification of organisms is sufficient evidence to establish the presence of infection. Amicrobic pyuria is often associated with tuberculosis, although it is commonly seen also in virus infections of the urinary tract. In this connection it should be mentioned that about one-third of all tuberculous infections of the urinary system are complicated by secondary pyogens so that the presence of non-tuberculous organisms does not automatically exclude that condition from our diagnostic consideration. On the contrary, the careful physician will be well advised to suspect an underlying tuberculous infection when he encounters pyuria refractory to treatment. Bacteriuria without pyuria is uncommon, and usually indicates a contaminated specimen bottle, but it may be seen in low-grade infections common to females, during the initial phase of acute staphylococcal infection of the kidney, and occasionally in conditions where large amounts of residual urine occur. For ordinary purposes the identification by staining of the type of organism is all that is necessary before the institution of a trial of therapy. Culture and sensitivity studies may be reserved for resistant varieties which fail to respond to usually effective measures.

From the bacteriological standpoint the therapeutic agents which we have at present function by reason of their bacteriostatic and bacteriocidal effect, but basically none of them would be curative were it not for the inherent combative powers of the body mediated through an intact reticulo-endothelial system. Should a drug fail to bring about the expected cure in the light of past experience with the agent, then the physician must logically search for the factor responsible for the failure. In general, persistent infection may be said to be due to one of three things: the drug used is ineffective against the organism present; there are complicating pathological conditions which serve to perpetuate infection, e.g., neoplasm, obstruction, calculus or foreign body; or the body resistance is such that even though the drug is locally efficacious, its benefits are not supported by the usual adaptive response to bacterial invasion.

Once failure has been substantiated after an adequate trial of primary therapy further detailed urological investigation is indicated before additional therapy is attempted. The importance of this examination cannot be overemphasized. It may reveal the underlying cause of the persistent pyuria, such as a calculus, neoplasm, obstructing lesion or foreign body, and will prevent the premature administration of antibiotics which we know are ineffective in the presence of these conditions. Under such circumstances the development of resistance on the part of the infecting

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organism is almost a certainty, and will obviate the later use of the agent when its protection following operation may be a vital factor in recovery.

The indicated examination should include endoscopic evaluation of the urethra and bladder, retrograde passage of catheters up both ureters, collection of upper tract or kidney urine specimens, and x-ray of the urinary system by infection of suitable contrast media. Culture of the urine may logically be employed at this time, and the organisms isolated tested for sensitivity to the agents of choice. At present these studies can be carried out for all of the available antibiotics in hospital or community laboratories, and in the State of Michigan, as well as in some other states, by the State Department of Health. The results of these tests will aid the therapist in the selection of the most effective agents or agent against the particular organisms involved, and will forestall expensive trials of therapy of no value by reason of the insensitivity of the organism to the drug chosen. The clinician may be justified in the use of an antibiotic in the face of a particularly virulent process, where time is a factor, without first obtaining culture and sensitivity studies. In such a case he must rely on the information obtained from microscopic examination of the stained urinary sediment for his choice of drug.

The Sulfonamides

These chemotherapeutic agents have proven effective in most urinary tract infections, and still remain the drugs of choice in the initial trial of therapy in uncomplicated cases. They have a wide range of effectiveness against both bacilli and cocci, are easy to administer, and are relatively inexpensive. Of the various compounds available, sulfacetamide appears to offer the greatest advantage, being soluble in the physiological acid range of urine without alkalinization, thereby minimizing crystalluria and renal damage. It is possessed of low toxicity, has a good range of antibacterial activity, and may be administered in the relatively low dose of 2.0 grams daily (0.5 grams q.i.d.), and still maintain a therapeutically effective urinary level. Generally five to six days of treatment will suffice. Sulfadiazine and sulfathiazole are also beneficial, and may offer a greater advantage in the coccal infections, but they have lost favor because of their tendency to form urinary concretions, and the greater incidence of toxic reactions associated with their administration.

Recently a new approach to the solution of this problem has been offered in the combination of two or more sulfonamides, based on the principle that the therapeutic actions of the compounds are additive while their solubilities continue to be independent. One such product, sulfadial, combines sulfathiazole 37 per cent, sulfadiazine 37 per cent, and sulfamerazine 26 per cent, and is recommended in doses of two grams stat and 0.5 grams every four hours. Another, tricombisul, offers equal parts of sulfadiazine, sulfamerazine, and sulfacetamide, and is used in slightly larger doses of two grams stat and one gram every four hours. As a rule these combinations are better tolerated orally, even in the higher doses, are possessed of a low rate of acetylation in the blood and urine, and appear to give an increased rapidity of response as compared with the other sulfonamides used singly.

Sulfathalidine, sulfamerazine, and sulfasuxadine, agents commonly employed to combat infectious diseases of the gastrointestinal tract, by reason of their low rate of absorption, have also been recommended as effective therapeutic agents in coliform urinary tract infections. Their effectiveness is based on their strong bacteriostatic action against B. coli, and their ability to interrupt the most common source of contamination, the bowel, thus affording the tissues of the urinary tract the opportunity to build natural resistance.

More recently an additional sulfonamide known experimentally as NU-445 has been offered to the physician. It too possesses remarkably good solubility over a wide pH range, and *in vitro* compares favorably with the therapeutic potentialities of sulfacetamide. It is used in doses of four to six grams daily for six to seven days of trial.

Penicillin

The pyogenic coccal urinary tract infections, although less common, offer considerable challenge to the therapist. Fortunately most coccal infections, including those due to the Gonococcus, Staphylococcus albus and aureus, and the Beta-hemolytic streptococcus respond readily to penicillin. Streptococcus fecalis, however, is unaffected by the drug in most instances. Penicillin is of no value whatsoever in the Gram-negative bacillary infections. In mixed bacillary and coccal infections penicillin will bring about the expected elimination of the cocci when combined with the sulfonamides or newer therapeutic agents, but, if used alone, even the coccal flora may prove resistant due to the

production of penicillinase by certain Gram-negative rods.

The dramatic antibacterial action of penicillin has prompted extensive research into the best mode of administration. The most satisfactory method at present, from the standpoint of urinary tract infections, has been the single daily injection of 400,000 units of procaine penicillin-G intramuscularly. Such a dose will maintain effective therapeutic blood and urinary levels for at least 24 hours against the organisms mentioned. The oral administration of aluminum penicillin with sodium benzoate offers an effective therapeutic approach to coccal urinary tract infections. It has the advantage of resistance to gastric acidity and intestinal enzymatic destruction. Given in amounts of 150,000 units four times daily it is equally as effective as 300,000 units eight times daily of the older soluble oral preparation. It has been reported satisfactory in 97 per cent of a series of cases of acute gonorrhea by Bohls, Cook and Potter when administered in amounts of 250,000 units eight hours apart for two doses.

Recent literature has stressed the inadvisability of administering sulfonamides and procaine penicillin in combination. More careful survey, however, reveals the fact that the procaine portion of the molecule is so slowly released that the combination of para-amino benzoic acid formed does not reach a high enough level in the body to produce an antisulfonamide effect, and therefore their combined use is compatible.

Penicillin is apparently completely lacking in inherent toxicity. The many untoward reactions, and even deaths, attributed to it can be ascribed to Herxheimer-like reactions or sensitivity manifestations. The percentage of reactions is actually very low in proportion to the number of patients who are recipients of the drug, and most that do occur are controlled by antihistaminic drugs.

Streptomycin

With the introduction of streptomycin further aid was gained in the search for effective agents against Gram-negative bacilli so common as causative agents in urinary tract infections. After three years of clinical evaluation it would appear that this drug is efficacious in approximately 50 to 54 per cent of the infections caused by B. coli, Aerobacter aerogenes, Proteus ammoniae, and Proteus vulgaris. It is only occasionally effective in Pseudomonas aeruginosa and in certain strains of Streptococcus fecalis.

Streptomycin gives best results in doses of 1.5 to 2.0 grams daily in divided intramuscular injections. This will maintain a blood level of 20 units/c.c., effective against most susceptible organisms. The response to therapy, if it is to occur at all, is usually seen within four days of initiation of treatment, although a total of six to seven days are recommended. Its effectiveness is enhanced by an alkaline urine, pH 7.2 to 7.4, easily attained by the use of sodium or potassium citrate orally, one teaspoonful of a 25 per cent solution four to five times per day being recommended.

Streptomycin is more vulnerable than the other antibiotics in the ease and rapidity with which organisms become resistant to its action. This places very definite limitations on its usefulness, and often poses a problem of co-ordination of therapeutic efforts with other drugs. To be of value it must be administered in satisfactory initial doses, and maintained at that level throughout therapy. Once resistance has developed increased dosage has no further effect, a factor nicely illustrated when using the drug to sterilize the bowel prior to surgical procedures. When given orally for this purpose there occurs a marked reduction in the coliform flora within two days, but shortly after resistant strains begin to flourish even in the face of drug administration. Sulfathalidine and sulfasuxadine have been recommended in combination with streptomycin to reduce the speed with which the bacterial flora returns, and the two are recommended for such purposes.

Streptomycin has a definite inherent toxicity. Most patients treated for three weeks or longer on doses of 20 mgm/Kg of body weight experience subjective dizziness and objective evidence of vestibular damage. In a few cases permanent deafness has resulted. Mild renal irritation often accompanies its administration, but is rarely of any moment. One should, however, give it with caution in patients having pre-existing impairment of renal function. In such cases lower doses may give satisfactory results, and may safely be administered where laboratory control is available.

Hydrogenated streptomycin or dihydrostreptomycin is less toxic to the vestibular apparatus, the indications and dosage are the same, and the appearance of resistant strains just as common. It has largely supplanted streptomycin in therapy, but recently Romansky has called attention to a dis-

turbing incidence of cochlear damage with subsequent deafness in a fairly high percentage of patients treated with this drug. Symptoms are said to appear six to eight months after the conclusion of therapy, and if this proves universal, may nullify the present benefits offered by this agent.

Aureomycin

Aureomycin has been found to have a wide antibiotic spectrum, including infections caused by Gram-positive and Gram-negative bacteria. Observations by Grayson Carroll and associates have shown it to be effective against B. coli, E. intermedium, Aerobacter aerogenes, Paracolon, Alkaligenes, and Streptococcus fecalis. All strains of Pseudomonas and Proteus examined appear highly resistant. Pathogenic strains of hemolytic streptococci, and gonococci are almost completely inhibited by 1.0 mcgm/c.c. or less, but Proteus and Pseudomonas require 100-250 mcgm/c.c. for complete inhibition.

To date there has been no evidence of gross resistance with penicillin, streptomycin or polymyxin, and there has been no significant tendency toward the development of resistance after therapy either *in vitro* or *in vivo*.

The drug is available for oral and intravenous use, and after administration appears rapidly in the urine. It is excreted continuously for two to three days after a single intramuscular injection of 0.5 gram. Excretion studies, however, suggest that the optimal interval between oral doses should be six to eight hours. A dose of 0.5 gram every six hours over a seven-day period is usually sufficient to give therapeutic results in the majority of cases. Many investigators have noted a tendency for recurrence of infection within a week or two after successful completion of therapy with this drug, and have advised that the original intensive course of treatment be followed by additional therapy at the reduced dose of 0.5 gram t.i.d. for ten days to two weeks after the urine has cleared.

Toxic reactions, although minimal, are annoying, and consist mainly of nausea and diarrhea. The nausea has been found to respond to the simultaneous administration of amphojel with each dose of aureomycin, while diarrhea is usually controlled by routine constipating measures.

Chloromycetin

This new antibiotic compares favorably with aureomycin in its range of antibacterial activity. It is more stable than aureomycin, has exhibited no toxic manifestations of importance, but requires a comparatively greater dose for the same therapeutic effect. It is recommended in amounts of 50 mgm/Kg of body weight in divided doses orally over a seven-day period. A total of 10 grams is usually sufficient in most cases. Analysis of therapeutic results from many sources tends to show that the methods of giving the calculated daily dose has little influence on the response, although the interval between administration should not exceed eight hours.

Studies at the University Hospital Urological Service found the drug effective against B. coli, Aerobacter aerogenes, Paracolon, E. freundi, Streptococcus fecalis, Staphylococcus albus and aureus, diphtheroids, and in some cases of B. proteus. It failed in all infections due to Pseudomonas.

Unlike aureomycin we have observed the rapid development of resistance in certain strains of B. proteus, B. alkaligenes, and Aerobacter aerogenes when the drug was used in doses of 0.25 gram every six hours, even though preliminary sensitivity studies indicated that a favorable response could be expected. Like aureomycin, many patients showed clinical improvement and a return of the urine to normal on administration of chloromycetin over a five- to six-day period only to have a recurrence of symptoms within a week or two, and again demonstrate an infected urine with the same organisms. For this reason, several investigators have recommended a reduction in dosage to 25 mgm/Kg of body weight after the initial response, and maintenance of that dose schedule for an additional ten days to two weeks.

Polymyxin

This drug, one of the polypeptides, has previously been suggested for use in urinary tract infections by Long and others, but the clinician has been reluctant to use the drug because of its known nephrotoxic effect.

Studies by Pulaski and Rosenberg have shown polymyxin to have a marked inhibitory effect on Salmonella, Shigella, Klebsiella, Coli-Aerogenes, and, most important of all, on Pseudomonas. Staphylococci are moderately sensitive, while B. proteus and Beta-hemolytic streptococcus are refractory.

On daily doses of two to four mgm/Kg of body weight effective plasma concentrations of one to eight mcgm/c.c. are obtained. The peak level

BACTERIAL SPECTRUM OF THE COMMON ANTIBIOTICS

	Organisms Commonly Sensitive	Organisms of Equivocal Sensitivity	Organisms Commonly Resistant
Penicillin	Staphylococcus albus Staphylococcus aureus B-hem. streptococcus Gonococcus		Streptococcus fecalis All Gram-neg. bacilli
Streptomycin	Gonococcus B-hem. streptococcus B. coli	Staphylococcus albus Staphylococcus aureus Streptococcus fecalis A. aerogenes B. alkaligenes B. proteus Paracolon	Pseudomonas
Aureomycin	Staphylococcus albus Staphylococcus aureus B-hem. streptococcus Gonococcus Paracolon A. aerogenes B. coli	Streptococcus fecalis B. alkaligenes	Pseudomonas B. proteus
Chloromycetin	Staphylococcus albus Staphylococcus aureus B-hem. streptococcus Gonococcus Paracolon Streptococcus fecalis B. coli	B. proteus A. aerogenes B. alkaligenes	Pseudomonas
Polymyxin	Pseudomonas B. coli A. aerogenes	Paracolon	B. proteus B-hem. streptococcus

BACTERIAL SENSITIVITY OF THE COMMON ANTIBIOTICS

Expressed in Micrograms per cubic centimeter

	Effective Therapeutic Range	Range of Equivocal Effectiveness	Ineffective Range
Penicillin	0.01-4.0	4.0-18.0	18.0-above
Streptomycin	0.1-12.0	12.0-20.0	20.0-above
Aureomycin	0.02-0.6	0.6-2.5	2.5-above
Chloromycetin	3.12-12.5	12.5-50.0	50.0-above
Polymyxin	0.08-0.60	0.60-12.0	12.0-above

occurs about two hours after injection; the half peak at six hours. These investigators found the effect of the drug to be cumulative if given at four-hour intervals, but safe at twelve-hour intervals. The excretion of the drug is primarily renal when given intramuscularly, and when the dose does not exceed 2.5 mgm/Kg of body weight there appears to be no evidence of nephrotoxicity, but above 4 mgm/Kg of body weight evidences of parenchymal damage are noted with the appearance of casts, red blood cells and albumin. When administered orally the drug cannot be detected in the blood.

Toxic symptoms are found with the first dose of the drug and consist mainly of paresthesias, hypesthesias, dizziness, weakness, and malaise. The neurotoxic symptoms continue throughout therapy and cease as soon as the drug is discontinued.

In general, polymyxin appears to be a useful adjunct to antibiotic therapy, especially in the treatment of pyocyaneus infections, for which we have had no really effective measures in the past. Further clinical trial appears indicated before its general use may be safely advocated.

Discussion

This brief summary has served to emphasize the wide variety of antibacterial agents now available for the treatment of urinary tract infections. The physician might well ask, however, on what basis he should make his choice in the treatment of any given case, for antibiotic agents are very expensive, especially aureomycin, chloromycetin, and dihydrostreptomycin. Unless these substances offer universal advantages over less expensive drugs they obviously should be withheld in the planning of treatment. Experience has shown that each of the antibiotics does possess unique advantages in combating certain strains of organisms which, fortunately, cause relatively few of the infections that occur clinically. Thus the majority will respond to inexpensive medications. It is evident then that the physician will be well advised to employ one of the chemotherapeutic agents by preference when treating an acute infection, or embarking on the initial trial of therapy in a chronic infection.

Penicillin is the therapy of choice in most coccal infections, except those due to the Streptococcus fecalis. It is worthless in the treatment of infections caused by Gram-negative bacilli.

Of the antibiotics suitable for the therapy of Gram-negative bacillary infections resistant to the chemotherapeutic agents, aureomycin and chloromycetin offer the widest range, but both remain ineffective against the Pseudomonas group, and for the most part do poorly against B. proteus. Chloromycetin offers the most effective therapy against Streptococcus fecalis. Unlike aureomycin, chloromycetin has already shown a tendency toward the development of resistant strains, a fact which may lessen its future value. Streptomycin, in addition to its undesirable neurotoxicity, has demonstrated an even greater tendency toward the accumulation of resistant strains after short periods of treatment, and must be considered third choice of the three. Polymyxin offers greatest promise in the therapy of Pseudomonas infections at the price of nephrotoxicity, although it now appears that this is far less serious than was originally thought if dosage is carefully controlled.

The practitioner might now say that all of this

is very well, but what is the physician to do with those patients who show good response with the newer antibiotics as predicted by sensitivity tests, but who return within short periods of time with recurrence of symptoms and pyuria. Every doctor who treats urinary tract infections is eventually faced with this problem. The author has no panacea to offer, but some helpful suggestion on the basis of past experience might be in order in the nature of prevention of this distressing circumstance.

The prevention of failure, whether it be initial or delayed, is often dependent on the proper respect for dosage. To reduce recommended amounts in an effort to save expense is poor economy when one is combating organisms already resistant to a previous trial of another drug. A vigorous therapeutic attack is mandatory, using sufficient quantities to maintain recommended blood and urine concentrations. Therapy at that level should be required until the urine is free from pus and organisms, or is negative by culture. Experience demonstrates that prolonged therapy following the initial subsidence of infection will bring about permanent cure more often than the shorter courses of therapy previously advocated. If the organism is sensitive to the antibiotic in use the results of treatment are usually noted on urine examination by the third or fourth day, but cessation of treatment at this time usually results in recurrence within a short interval. Usually at least seven days of therapy is recommended, and in the case of chloromycetin and aureomycin, the dosage may then be cut in half and continued for an additional week to ten days or longer. Dr. R. K. Ratliff has found that satisfactory therapeutic results are secured by using 0.25 gm. of aureomycin 1 to 2 times a day for two to three weeks after a therapy of the acute phase of prostatic infection, preventing the development of chronic prostatitis. Others have recommended that a similar program be used in resistant urinary tract infections. Dr. V. J. O'Conor has suggested a combination of streptomycin and sulfathaladine or sulfasuxadine in the treatment of recurrent lower urinary tract infections in females on the assumption that the source of contamination is in the bowel, and that following satisfactory response with the initial therapy the sulfonamides be continued in reduced dosage for an additional two to three months. It was felt that this was a safe procedure in view of the low rate of absorption of the drug, but recent reports indicate that anemia, and/or agranulocytosis may result from such a regimen, and should be anticipated by close laboratory observations.

The advantages offered by combinations of drugs in the treatment of mixed or single organism infections should receive consideration both in the therapy of recurrence and as initial treatment. As noted, no drug completely covers the entire bacterial spectrum. It is logical to assume that mixed coccal and bacillary infections will respond best to concommitant use of more than one drug. Thus, combinations of penicillin and sulfacetamide are more effective than either used singly. In this regard, some investigators have pointed out that frequently organisms resistant *in vitro* to either of two antibiotics will show susceptibility when the two drugs are combined for an additive effect that is difficult to explain bacteriologically. This has been substantiated clinically in our experience using chloromycetin and sulfacetamide. We are now experimenting with this and other combinations.

Other drugs previously proven of benefit by clinical experience are still available for use should the chemotherapeutic and antibiotic agents fail. Hexamethyleneamine or methanamine, commercially sold as urotropin, depends for its effectiveness by reason of the formation of formaldehyde in the presence of an acid urine, pH 5.0 or less. It is of value in Gram-negative bacillary infections, and may be administered in doses of four to five grams per day with five to eight grams of ammonium chloride to maintain acidity. Therapy may be continued for from ten to fourteen days. Mandelic acid is also of benefit in the same bacterial range, except Proteus ammoniae, in the presence of an acid urine. It may be given in a dose of 15 c.c. of the syrup of ammonium mandelate four to five times a day with ammonium chloride. Methenamine has the disadvantage of bladder irritation, mandelic acid often induces nausea. Both require a reduced urinary output to be effective, a violation of one of the rules of therapy in the management of urinary tract infections. Recently a combination of the two, Mandelamine, has been introduced, and is recommended without acidification of the urine, but it appears no more beneficial than either one used singly, although side effects are less noticeable. While these drugs are much less useful today in treating infectiions than the other substances under discussion, their value should not be overlooked. In

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Bronchoscopy as an Aid in the Diagnosis of Chest Lesions

By Donald S. Bolstad, M.D.
Detroit, Michigan

AS LATE AS 1920 the bronchoscope was considered an instrument to be used almost solely to remove foreign bodies from within the trachea and bronchi. The procedure of bronchoscopy was considered a heroic one, attended by considerable danger and a good deal of local publicity.

Today, though the bronchoscope still serves this valuable purpose and the publicity occasionally still is attendant upon its use as such, the percentage of bronchoscopies performed for the removal of foreign bodies is small in comparison with those done primarily for diagnosis of lesions in the chest.

As operators became skilled in the use of the bronchoscope in connection with their foreign body removals, they began to evidence a curiosity as to the appearance of the trachea and bronchi in both acute and chronic disease of the chest. Certain diseases present rather typical pictures as viewed through the bronchoscope, making the procedure of tremendous value in arriving at an accurate diagnosis. Particularly is this true when other diagnostic procedures leave the problem unsolved.

The value of bronchoscopy in diagnosis is primarily dependent upon information obtained by direct visualization. However, not all areas of the lung are capable of direct inspection. Only the main bronchi and portions of the lower lobes' secondary bronchi can be directly visualized, although both upper lobe bronchi and the middle lobe orifice on the right can be seen through the bronchoscopic telescope. Secretions coming from the various lobe orifices can be aspirated and examined for definitive information.

Bronchoscopic information should be considered a link in the chain of diagnostic procedures. As such, it ranks fourth in importance behind clinical studies including history and physical examination, and roentgen and laboratory studies. Many diseases of the chest, especially those of a chronic nature, defy identification until the bronchoscopist is consulted.

From the Department of Otolaryngology of the Henry Ford Hospital, Detroit, Michigan.

Bronchoscopy need not be the ordeal it so often has been said to be. Most patients are pleasantly surprised with the ease of the procedure and do not hesitate to say so. When repeated bronchoscopic examinations or treatments are necessary, patients seldom refuse to submit to the procedure.

In the adult the examination is done with the aid of topical anesthesia only. Almost without exception, this method is preferred to a general anesthesia because it permits the co-operation of the patient during the examination. Children under the age of five usually can be done without anesthesia. Above this age to puberty, ether anesthesia is the agent of choice.

We cannot all be bronchoscopists, for the procedure requires technical skill, and interpretation of minor changes requires a highly trained eye. The instruments, too, are expensive and a complete armamentarium is a luxury few can afford. Everyone, however, should be familiar with the indications for bronchoscopy and what can be expected from the procedure. To familiarize the average practitioner with such indications is the purpose of this paper rather than to comment on the actual use of the bronchoscope.

Various changes in chest x-rays practically demand bronchoscopic examination to determine the exact nature of the disease causing these changes. Any dense, uniform, lobar or unilateral involvement unaccompanied by acute symptoms is indicative of a lobar or unilateral atelectasis, and the patient lacks a complete work-up until the bronchus leading to that lobe or lung has been examined from within. Postoperatively such an x-ray finding when accompanied by fever, cough and dyspnea may indicate mucus plug in that bronchus, and aspiration of this plug clears the way for complete aeration of the lobe or lung. Most postoperative pneumonias are in reality atelectatic lobes. Such a picture in children, even in the absence of previous history, is frequently found to be due to an inspirated foreign body, commonly of vegetable origin. A vegetable foreign body when not removed promptly is commonly responsible for the subsequent development of lung abscess or bronchiectasis.

Not infrequently an atelectasis may be caused by the presence of a tumor mass, benign or malignant, but more commonly the latter. The lesion can be identified by direct biopsy. Tuberculosis may cause endobronchial ulceration, which sub-

sequently scars even to the point of complete stenosis.

A lone lesion, either centrally or peripherally located, might represent any one of several conditions such as lung abscess, tuberculosis, or malignancy. Frequently, a bronchoscopy is responsible for the difference between neglect and prompt and adequate treatment, especially if the lesion could easily be interpreted as tuberculous but from which no sputum can be obtained.

Although the lesion itself may not be visualized directly, it is frequently possible to obtain secretions for laboratory examination consisting of smear, culture and guinea pig inoculation, to identify a bacteriological agent, or for a smear to be stained by the method of Papanicolaou for malignant cells. Many smears have recently proven positive. In some of these cases no endobronchial lesion could be visualized through the bronchoscope and would have been missed without such examination. We are employing this means of examination with increasing frequency.

Increased bronchovascular markings, especially of the lower lobe, may mean the presence of bronchiectasis. In younger individuals who can be considered as surgical candidates, the identification of the bronchi involved can be accurately made by bronchoscopy and subsequent lipiodol filling, thus making possible a better decision as to operability of the lesion.

We employ bronchoscopy very frequently as a preliminary to collapse therapy in the treatment of pulmonary tuberculosis, especially pneumothorax and phrenic crush. Our experience has shown that many cases of unsuccessful pneumothorax were not due to adhesions but were caused by endobronchial lesions. When this is treated first and cleared, collapse measures are much more likely to succeed. Many unexpandable lungs are thus avoided.

Any unexplained hemoptysis whether as a single occurrence or recurrent may be indicative of malignancy or bronchiectasis, and bronchoscopy should be done promptly unless the blood loss is copious.

One word of caution here: make sure there is not a mitral stenosis! This is not an uncommon cause of hemoptysis.

Persistent cough, whether productive or not, persistent wheeze, whether inspiratory or expiratory, or dyspnea, when not explained by physical, x-ray and laboratory examination, warrant bronchoscopic examination. Cough may be due to suppurative disease or to bronchial irritation from tumor. Often other methods of examination fail to reveal the exact nature of the disease. Before prescribing cough mixtures for prolonged periods of time, request bronchoscopic examination.

Wheeze, when not asthmatic, is due to narrowing of a bronchus by cicatrix, foreign body, or tumor mass within a bronchus or to pressure on a bronchus from without. Unilateral wheeze is especially important as a diagnostic sign, even though it may be transmitted weakly to the opposite side, and bronchoscopy is indicated to determine the cause.

Dyspnea, when not cardiac in origin or due to detectable pulmonary disease, usually is due to bronchial obstruction which may not always be apparent on x-ray alone. A check-valve type of obstruction may allow air to enter the lung but not to escape, thus causing a unilateral emphysema. If x-rays are not taken in both inspiration and expiration, such a condition might easily be missed. This is especially true with foreign bodies in children.

Contraindications to bronchoscopy fortunately are few and for the most part are relative. Aneurysm, when recognized as such, probably is the strongest contraindication. Fortunately it is not common.

Severe hypertension or advanced cardiac disease might cause serious complications if bronchoscopy were done without knowledge of their existence. Also, we hesitate to do bronchoscopy for a patient with a history of cerebral-vascular accident.

Acute upper respiratory infection or severe hemoptysis may cause one to postpone bronchoscopy—the former because of the danger of extending the infection, the latter because of the danger of aggravation or resumption of the hemoptysis. Blood streaked sputum, however, with no frank hemoptysis is not a contraindication and need not delay the procedure.

None of these conditions are to be considered contraindications when a foreign body is present. Bronchoscopy should not be withheld from these people under any circumstances, with the possible exception of massive hemoptysis, an unlikely complication.

The whole problem of bronchoscopy in its relation to diagnosis of pulmonary disease has aptly been expressed by Chevalier Jackson: "The internist can tap, look and listen; the roentgenologist can look through the patient; and if we add the bronchoscopist who can inspect the interior of the lungs, we have a strong diagnostic team."

Laboratory Methods for the Diagnosis of Malignancies

By W. L. Brosius, M.D.

Detroit, Michigan

JAMES EWING, M.D., in the Beaumont Foundation Lecture of the Wayne County Medical Society at Detroit in 1931 said, "The results to date indicate that no test of definite value has been found for advanced cancer, and the study of the chemical and physical conditions in advanced cancer indicates that no universal reaction of the serum should be regarded as a possibility."

F. Homburger, M.D., in a review published in *Cancer* (Vol. 3, Pages 143-172), entitled "Evaluation of Diagnostic Tests for Cancer," states: "With our present lack of more precise knowledge, it appears impossible today to foresee a general test for cancer and concentration on specific tests for individual types of tumors may be the safer and more promising path."

Tests in specific types of cancer which are of proved value are:

A chemical test for alkaptonuria in multiple myeloma.

Enzyme test—Acid phosphatase in prostatic cancer with bone metastasis.

Hormonal tests in tumors showing sufficient maturity to produce hormones.

Gonadotropin is produced in chorio-epithelioma, teratoma testis, and certain other testicular tumors.

Certain adrenal tumors of the cortex and medulla may produce hormones.

Hormonally active pancreatic islet tumors, certain thyroid and certain parathyroid tumors.

The roentgen ray is of value not only for visualization, but may be used as a therapeutic test, especially in lymphatic tumors.

Radioactive isotopes, as tracers, are of definite value especially I^{131} in thyroid tumors, and P^{32} in actively growing tumors.

The main reliance in the laboratory diagnosis of carcinoma is visual observation backed by experience. The surgeon and pathologist should continually improve their ability to recognize the gross characteristics of malignancy. Biopsy is frequently the procedure of choice; small accessible tumors and lymph nodes should be removed intact.

Frozen section has its definite value and also its limitations, which must be recognized by the surgeon and the pathologist.

The cytopathology of fluids and secretions has received much attention since publishing of Papanicolaou's studies.

Enthusiasm for these procedures has been stimulated by wishful thinking, and the publicity they have received in the professional and lay publications have had their good effects and also their harmful effects. Final evaluation of the procedures awaits careful investigation with controls and must ultimately come from those who do the tests. Reticence on the part of conscientious workers should not be interpreted as aversion to the tests. The tests are of definite value and have been a tremendous stimulus to the study of cytopathology.

Cancer *in situ* is a difficult condition to recognize with accuracy, and we must learn to determine when the epithelial changes so often seen in response to irritation have become irreversible.

Continued investigation and the use of new tools make the outlook in cancer diagnosis brighter.

Electrophoresis provides methods of chemical examination not heretofore possible.

The electron microscope increases the visual range.

The phase microscope permits the study of living tissues.

Reliance for the present must be on time-tested recognition, microscopically, of histopathological changes.

R. S. Sykes Lecture, Michigan Postgraduate Clinical Institute, Detroit, Michigan, March 9, 1950.

MSMS

THREE-MINUTE MEDICINE

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ever, several large metropolitan papers thought well enough of the device to give it prominent editorial treatment. Magazine-wise the program received attention in such national publications as *Hosiptal Topics,* whose treatment is pictured elsewhere in THE JOURNAL. Several pharmaceutical manufacturers have used the idea in their house organs with Reed & Carnick being the latest to ask for editorial copy for their *Medical Pocket Quarterly.*

While the "hour glass" campaign was presented to all component societies of the Michigan State Medical Society in January, some groups have as yet not implemented the program within their area. In the event a county society desires individual timers for their membership, these may be secured by writing the Michigan State Medical Society, 2020 Olds Tower, Lansing 8, Michigan.

Detroit Physiological Society

Meeting of March, 1950

Some Physical Properties of Bone

F. Gaynor Evans and Milton Lebow

Departments of Anatomy and Engineering Mechanics, Wayne University

The behavior of the femur as an elastic body is indicated when the bone is vertically loaded in a Universal materials-testing machine. The bone bends under the load but returns to its previous condition when unloaded. "Stresscoat" tests show that bending under vertical load produces tensile strains in the superior aspect of the neck and the lateroanterior aspect of the shaft. To test regional strength differences standardized samples of compacta were cut from the anterior, posterior, medial and lateral quadrants of the proximal, middle and distal thirds from femurs of 26-year-old and 45-year-old Negro female and 64-year-old white male cadavers. Similar samples were cut from the femur and tibia of a 39-year-old Negro woman (amputation). Direct tension tests of these samples were made with a strain gage dynamometer and the testing machine. Wet and dry samples were tested. Samples from the lateral quadrant and the middle third of the femur had the highest average tensile strength. In the tibia the anterior quadrant and proximal third were the strongest. The stress-strain curve of the dry samples approximated a straight line to failure but that of the wet samples deviated from a straight line as the ultimate strength was approached. The difference in the shape of the stress-strain curve means that the wet samples could absorb considerably more energy before failing. The average tensile strength varied between 12,000 and 20,000 pounds per square inch.

* * *

The Reaction of a Crustacean to a Helminth Developing within it

Dominic L. DeGiusti

Department of Biology, Wayne University

The reactions of invertebrate intermediate hosts against helminth parasites has been little studied. This paper will discuss the reaction of the crustacean *Hyalella azteca* to *Leptorhynchoides thecatus* an acanthocephalan normally developing in this crustacean, and *Echinorhyncus corregoni,* an acanthocephalan believed to develop in nature in the amphipod *Pontoporeïa hoyi,* but able to infect and begin development in *Hyalella azteca.* Utilizing these different species of acanthocephala in *Hyalella azteca* makes it possible to contrast the reaction of the host to a normal parsite with that of a parasite abnormal to it.

The visible reaction is cellular. In both species of parasite the first reaction occurs as a hyperplasia of the intestinal epithelium surrounding the larval parasite (acanthor) which is penetrating the intestinal wall. This reaction fails and the acanthor penetrates into the crustacean haemocoele. In the haemocoele large amoebocyte cells congregate at the site of penetration covering the area and parasite with a protoplasmic syncytium formed by coalescing of numbers of amoebocytes. When the reaction is successful in overcoming the parasite the protoplasmic sheath becomes hardened and forms a capsule enclosing the parasite. The parasite then degenerates and is absorbed. The acanthocephalan normal to the crustacean is able in most instances to outgrow the enveloping sheath. Lowered temperature favors the cellular reaction. The acanthocephalan abnormal to the crustacean elicits a more intense reaction. The parasite is rapidly overcome. Only in rare instances does it escape to continue development. Complete development in the crustacean of this species has not as yet been observed.

* * *

The Specificity of Antithromboplastic Activity

Robert I. McClaughry

Department of Physiology and Pharmacology, Wayne University College of Medicine

Tissue extracts containing thromboplastin will kill mice when injected intravenously. Intravascular thrombin release occurs, which results in the formation of disseminated thromboemboli showing characteristic differences from the common throm-

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Bon Secours Hospital Clinic Day

June 6, 1950

PREOPERATIVE AND POSTOPERATIVE DIABETIC CARE

T. N. Heenan, M.D.

Preoperative diabetic care depends on the nature of the proposed operation and the condition for which it is to be performed. In the case of elective, non-infectious surgery the diabetic should be under perfect control and this control should be maintained for a few weeks before the surgery is done.

In the case where there is an acute infectious process perfect control is usually impossible. Here reasonable control should be obtained but the operation should not be delayed while futilely trying to control the diabetes. Perfect control can always be obtained in a very short time after the surgical removal of the infectious process.

In emergency surgery the diabetic control should be started immediately and perfect control obtained as soon as possible following the operation. The operation should not ordinarily be delayed on account of the diabetes.

The postoperative diabetic care depends upon: (1) the anesthetic given and (2) the nature of the surgery performed.

If the anesthetic is local or is refrigeration anesthesia, the dietary and insulin therapy proceed with little or no modification as the result of the operation. If an infective process has been removed a reduction in insulin dosage is frequently necessary. This should be kept in mind.

When spinal or general anesthesia has been given, the diet should be governed by the custom of the surgeon and the insulin requirement regulated by the amount of sugar appearing in the urine except in those cases with kidney dysfunction, when blood sugars must be utilized. When the patient becomes able to eat normally, a weighed diet should be started and control obtained.

Gastric surgery poses a special problem as does the use of intravenous glucose and protein. A knowledge of the available glucose in the solutions will provide the key to the proper administration of insulin in these cases.

HEMOCHROMATOSIS

R. J. Reichling, Jr., M.D.

Hemochromatosis is a rare condition, less than 600 cases having been reported, characterized by a triad of, (1) marked deposition of iron containing pigments in many of the body organs, (2) cirrhosis of the liver, and (3) diabetes mellitus.

It is thought by some authorities to be a hereditary disease of metabolism. Others consider the etiology to be a vitamin A deficiency with a defect in the intestinal mucosa and a resultant increase in the absorption of iron.

The average age of onset is forty-five to fifty years, the greatest number of cases being in males. The complaints are (1) pigmentation of the skin—a generalized bronze color, more marked on the exposed areas, (2) symptoms of diabetes—polydipsia, polyuria, loss of weight and ease of fatigability, (3) symptoms of cirrhosis—epigastric pain, swelling of the feet and abdomen and loss of appetite, (4) symptoms attributable to involvement of the anterior lobe of the pituitary—impotence, loss of or change in texture of the hair and atrophy of the testes.

Physical findings follow the same pattern. There is pigmentation of the skin, aesthenia, enlarged liver and spleen, changes in or loss of body hair, edema of the legs and ascites, atrophy of the testes, areas of ecchymosis, and all the other findings of cirrhosis and diabetes.

Laboratory findings are of the same pattern. There is increased prothrombin time, a moderate anemia, an increased cephalin floculation and an abnormal bromsulphathalein test. Hyperglycemia and glucosuria are also present. The diagnosis is proven by the findings in liver and skin biopsy. The skin test of Fishback is also conclusive.

Treatment consists of insulin, high carbohydrate diet, vitamins, amino acids and symptomatic medication. The prognosis is poor with many patients being insulin-resistant. The average length of life is eighteen and a half months; however, one patient has lived over thirteen years. Death is result of diabetic coma, 50 per cent; cirrhosis of the liver, 11 per cent; pneumonia, 10 per cent; tuberculosis, 9 per cent, and cancer of the liver, 7 per cent.

A case of hemochromatosis with sections of skin and liver is now presented.

DIFFERENTIATION OF CARDIAC EMERGENCIES

Hugh Stalker, M.D.

When seeing a patient with medical cardiac emergency (all other diagnoses having been eliminated in this talk) one must observe:

I. Is the patient breathing with difficulty?

II. Is he in pain?

III. Is the pulse rate grossly irregular, unusually fast, unusually slow or cannot be felt?

IV. Is the patient comatose?

I. If breathing with difficulty
   - A. Acute pulmonary edema of cardiac origin from
     1. A failing hypertensive heart.
        - (a) Aortic insufficiency or stenosis.
        - (b) Infarction of left ventricle with or without thrombosis.

(c) Tight mitral stenosis.

B. Acute cor pulmonale.

II. If in pain.

A. Angina pectoris.

B. Coronary occlusion.

C. Cor pulmonale—emboli.

III. If pulse very fast.

A. Regular

1. Paroxysmal auriclular tachycardia.
2. Paroxysmal ventricular tachycardia.
3. Auricular flutter.

B. Irregular

1. Auricular fibrillation.

IV. If pulse very slow or patient unconscious.

A. Stokes-Adams syndrome.

SIGNIFICANCE OF ISOLATED PULMONARY LESIONS

W. George Belanger, M.D.

A number of cases of isolated, discrete lesions of the lung paranchyma will be presented, and discussion of same will be supplemented with slides. The differential diagnosis, significance and management of these pulmonary lesions, sometimes referred to as "coin lesions," will be covered, with particular emphasis on their significance.

BLEEDING PEPTIC ULCER

Ralph L. Fisher, M.D.

Ninety-three consecutives cases of bleeding from the upper gastro-intestinal tract have been treated without a fatality. Diagnoses were based upon history, x-rays taken in this clinic and elsewhere, and follow-up x-rays at later dates. Fifty-seven cases of this series have been carefully analyzed as to site of hemorrhage, age and other factors.

Bleeding from the upper gastro-intestinal tract as a result of benign ulcers occurs more frequently in men than in women. In our series there were forty-two males and fifteen females, a ratio of 2.8 to 1. Factors precipitating gastro-intestinal hemorrhage are: (1) upper respiratory infections; (2) alcoholic beverages; (3) emotional disturbances; (4) dietary indiscretions and (5) physical exertion and overwork. The period from October to March is stated to be the time interval during which most hemorrhages from benign ulcer occur. This was confirmed in our series.

Treatment consisted of a modified Sippy regimen and large amounts of blood when indicated. Continuous and massive blood transfusions are not only life saving but innocuous.

It is the opinion of the author from his experience with this series of cases that acute bleeding from peptic ulcer is essentially a medical problem. Surgery should be considered only after the bleeding has ceased and then in cases who are either over sixty years of age or have had two or three episodes of hemorrhage.

THE MANAGEMENT OF THE IRRITABLE COLON

Richard C. Connelly, M.D.

Our present concept of the irritable colon is one in which there is a dysfunction of the colon due to derangement of the autonomic nervous system. Evidence of imbalance of the vegetative nervous system affecting other portions of the gastro-intestinal tract, the cardiovascular system, the skin and sweat glands add weight to this diagnosis.

Before beginning treatment great care must be exercised to rule out organic disease which might produce the same or similar symptoms and physical findings as irritability of the colon. Therefore it is of utmost importance to take a careful history and make a complete physical examination including digital rectal examination and sigmoidoscopy. Roentgen study of the entire gastro-intestinal tract should follow. Unfortunately these examinations too frequently reveal unsuspected anal stenosis, rectocele, polyposis or carcinoma.

Factors which may add to or influence irritability of the colon are anaemia, hypoproteinemia, avitaminosis, hyperthyroidism, hypothyroidism, menopause, fatigue, nervous tension, psychic disturbance, bad habits of living and lack of knowledge of the functions of the gastro-intestinal tract.

Recognition of these factors by the physician and correction of them by the patient upon the advice and with the sympathetic understanding and encouragement of his physician will in many cases meet with success.

The tendency to irritability of the colon seems to be inherent in the bodies of certain individuals.

Exposure to the inciting factors above mentioned may cause a recurrence of the condition.

LOWER NEPHRON NEPHROSIS

William R. Flora, M.D.

The Nephron

1. Renal corpuscle.
2. Proximal segment—proximal convoluted tubule.
3. Intermediate segment—thin loop of Henle.
4. Lower segment—thick limb Henle, distal convoluted tubule.
5. Collecting tubule—excretory duct—not part of nephron.

Etiology

1. Severe muscle trauma.
2. Non-traumatic muscular ischemia.
3. Burns.
4. Incompatible transfusions.
5. Toxemia of prognancy.
6. Heat stroke.
7. Drugs.
8. Vegetable poisons and chemical agents.

Clinical Manifestations

1. Rapid, progressive renal insufficiency.
2. Shock (trauma, burns).
3. Hemolysis.
4. Urine and laboratory findings reflect renal insufficiency.
5. Hypertension.
6. Edema.
7. Uremia.
8. Mortality very high (eighth to tenth days critical period).

Pathological Changes

Microscopic

1. Degeneration and necrosis of distal segment.
2. Edema and cellular reaction about tubules.
3. Hemecasts in lower segments.
4. Slight or no change in glomerulus or proximal segments.

Functional Disturbances Due to

1. Heme compounds.
2. Toxic substances.
3. Renal Ischemia—anoxia.

Cause of Oliguria

1. Shutdown of renal circulation.
2. Obstruction of tubules.
3. Unselective reabsorption of glomerular filtrate.

Treatment

1. Reduce formation and absorption of toxins—pressure bandages.
2. Restore circulatory volume and pressure.
3. Alkalization.
4. Fluids.
5. Supportive treatment as required.

MODERN TRENDS IN SURGERY OF THE COLON

Donald N. Sweeny, Jr., M.D.

The surgical management of colon lesions has kept pace with the general advances made in surgery in recent years. There are many factors which can be credited with the lower morbidity, and mortality and the increased operability and curability. Among these contributions are (1) a more sound understanding of surgical physiology in the preparation of patients both preoperatively and postoperatively; (2) earlier diagnosis offered by new x-ray and pathology techniques; (3) better anesthesia; (4) improved surgical technique; and (5) chemotherapeutic management. A revival of interest in rectal operations which preserve the anal sphincter is a two-edged sword and only considerable experience can evaluate these procedures. "The young surgeon, in comparing his results with those of surgeons of the previous decade, should be a little charitable when he adds up one by one the many things that have altered the picture in surgery of the large bowel."

MULTIPLE PRIMARY MALIGNANCIES, INCLUDING THE LARGE BOWEL

J. F. Wenzel, M.D.

In a personal series of fifty-eight consecutive private patients operated for malignancy of the large bowel, forty-eight (83 per cent) were resected. Of these, three (6 per cent) had primary malignancy elsewhere in the body—lip, cervix and breast; six (12 per cent) had metastases to other organs; sixteen (33 per cent) had neighboring polyps of the large bowel and ten (62 per cent) of these polyps were also malignant.

An attack of cancer confers no immunity. Certain systems are carcinogenic, or susceptible to cancer. Once cancer has invaded one system in the body, all systems must be checked periodically thereafter.

INDICATIONS FOR CHOLECYSTOSTOMY AND A SIMPLE SURGICAL TECHNIQUE

James Blain, M.D.

Historical Data

1. Van der Wiel, in 1687, credited with performing the first operation on a living patient.
2. The first premeditated operative procedure on the gall bladder was done by Jean Louis Petit in 1743.
3. Two-stage cholecystostomy suggested by Thudichum in 1859.
4. J. S. Bobbs, an American surgeon, in 1867 accidentally performed a one-stage operation but thought he had opened an ovarian cyst.
5. In 1878 J. Marion Sims and Kocher performed deliberately a cholecystostomy in one stage. Sims' patient died.
6. In 1882 Carl Longenbuch performed the first recorded cholecystectomy.

Definition

The word cholecystostomy was coined by J. Marion Sims from three Greek words meaning bile, cyst, and mouth or incision. It is defined as an artificial fistula of the gall bladder connecting the latter with the outside of the body.

Indications for cholecystostomy

1. Elderly patients with acute cholecystitis.
2. In patients who are poor surgical risks, who have cholelithiasis.
3. An acute cholecystitis with marked inflammatory edema of the gastrohepatic omentum preventing accurate dissection of the common duct, cystic duct and cystic vessels.
4. Acute cholecystitis with gangrene.
5. Pericholecystic abscess.
6. Rupture of the gall bladder.
7. Any type of gallbladder pathology with associated pathology of the common-bile duct which cannot be carried out at time of operation. It may be necessary at a second operation to utilize the gallbladder to perform a cholecysto-enterostomy.

Review of some of the recent published reports on

acute cholecystitis with special reference to the surgical procedures used and the mortality rate.

Review of early or delayed operation in cases of acute cholecystitis.

Presentation of a simple surgical technique of cholecystostomy using a Foley catheter.

Advantages

1. Simplicity in execution in that it avoids invagination of a thickened, inflamed gallbladder.
2. Prevents leakage of bile around catheter.
3. Controls intra-luminal gallbladder hemorrhage.
4. Because of the tight fit of the Foley balloon, cholangiographic evidence of the biliary tree can be obtained to determine if it is structurally normal.
5. The resistance of the sphincter of Oddi may be measured.

Presentation of a typical case of acute cholecystitis with use of Foley catheter showing cholangiograms demonstrating the entire biliary tree.

THE MANAGEMENT OF PROLONGED LABOR

Robert G. Swanson, M.D.

Labor is usually considered prolonged when its duration extends beyond twenty-four hours. Approximately 4 per cent to 5 per cent of all cases fall in this category.

Too often there is misconception as to the time of onset of labor. Certain definite criteria are necessary to establish this diagnosis.

The causes of prolonged labor fall into the general classification of primary and secondary uterine inertia. An accurate evaluation of the etiology of each individual case is mandatory in evolving an immediate and long-range program of management.

In general, the management of prolonged labor calls for general supportive measures and on occasions operative interference that is correctly timed and properly chosen. Age and parity are important considerations in this matter.

Factors to be carefully considered in supportive measures include fluid balance, nutrition, anemia, and infection. The judicious choice of sedation at planned intervals is of paramount importance. The fractional administration of oxytocics are valuable in proper dosages. Their administration should always be personally supervised by an attending physician.

Under good management, the maternal risk in prolonged labor may not be too great. However, it should be born in mind that fetal risk by contrast is definitely increased as labor lengthens.

CONGENITAL ABSENCE OF VAGINA: CASE REPORT

Galen B. Ohmart, M.D.

Congenital absence of the vagina is a very rare condition. It is the result of some anomaly early in embryonic development.

The vagina, uterus and tubes arise in the embryo from the muellerian ducts. The vagina is formed by the fusion of the lower portions of the two muellerian ducts with absorption later of the septum between them. The uterus is similarly formed from the middle portion and the tubes are formed from the upper portion of the muellerian ducts with no fusion ever taking place.

The ovaries arise from a portion of the wolffian body on each side, and are in close proximity to the muellerian ducts.

Frequently associated with congenital absence of the vagina is some displacement, malformation or absence of a kidney.

A patient with congenital absence of the vagina has normal breasts and normal external genitalia.

Miss M. A., aged eighteen, consulted me, complaining of attacks of pain in the lower abdomen. She gave a history of never having menstruated. Examination revealed a patient with normal breasts and normal external genitalia, but with a complete absence of the vagina. An intravenous pyelogram on this patient revealed an absence of the right kidney. Cystoscopic examination revealed an absence of a right ureteral orifice.

An artificial vagina was constructed in this case by the Baldwin method in which a loop of small intestine was used to form the vagina with quite satisfactory results.

HYPERTHYROIDISM IN CHILDREN

Ira G. Downer, M.D.

Hyperthyroidism in children is a rare disease, and diagnosis is not made early, often in spite of the fact that symptoms are essentially the same as in the adult. The hyperfunctioning gland in the child is always a smooth, firm, and diffuse hypertrophy, symmetrically enlarged, and produces the picture of exophthalmic goiter. The disease may be severe but crises are not seen so often. Diagnosis must be made largely on history and clinical findings as the laboratory findings are not dependable. Because of the failure of thiouracil and related drugs to produce permanent remissions, the uncertain results of x-ray therapy, and the dangers associated with the use of radio-active iodine, subtotal thyroidectomy remains the treatment of choice in the child. Preoperative treatment is very important and the use of iodine is quicker and safer than the thiourea derivative.

Case report is that of an unusually severe case of exophthalmic goiter in a young girl who had a subtotal thyroidectomy with complete recovery.

Lantern slides.

CHANGES IN THE OCULAR FUNDI OF PREMATURE INFANTS

Cecil W. Lepard, M.D.

A new group of blind individuals is being added to our present list as the result of proliferative changes in the ocular fundi of premature infants. The condition is known as retrolental fibroplasia and occurs usually in infants whose birth weight is 3 pounds or less. Earliest stages occur in the retina and consist of congestion and hemangiomatous dilation of the retinal veins. Later a grayish edema and swelling of the retina at its anterior

border appear. From the optic nervehead a leash of vessels proliferaate forward to the swollen retina and then the fibrosis of the anterior vitreous begins. If this continues, a complete disc of white fibrous and somewhat vascular tissue results. This lies just behind the posterior lens capsule. At this stage, upon dilating the pupils one notes a light grayish membrane with blood vessels cutting off all view of the fundus. Except for hemangiomas of the skin, other evidence of disease is not present for uveal tissue alone seem to be vulnerable.

As might be expected, intensive studies have been made to determine cause and treatment. At the present time, vitamin E requirements in these infants seem greater than available E. Recommendations are reductions in vitamin A and iron and supplying alpha tocopherol in the diet. Results under this change have been encouraging.

MENSTRUAL TOXIN

Joseph A. Kasper, M.D.

In 1920, Bela Schick delivered a lecture in which he referred to an observation that cut flowers which were handled by a menstruating woman wilted rapidly. He expressed the opinion that menstruation might be a toxic phenomenon and quoted the Bible: Leviticus XV, 19-25. Being impressed by this possibility, Macht and Lubin conducted phytopharmacologic experiments, employing seedlings of Lupinus albus, a leguminous plant, grown in hydroponic solution. In 1923 they demonstrated that there is in the blood serum, blood plasma, saliva, sweat and other secretions of menstruating women a toxic substance which markedly inhibits root growth of these seedlings and produces a deleterious effect upon their protoplasm.

Olive W. Smith (1940) studied menstrual discharge with the idea that the "bleeding factor" responsible for the onset of menstruation, if it existed, must originate locally and might be present in this material. Using immature male rats (19 to 21 days old) she demonstrated that the discharge was highly toxic. It was found that 0.05 to 0.2 c.c. of the whole discharge for one period of young women with regular cycles was a fairly uniform M.L.D., causing death of the animals within 48 hours of a single subcutaneous injection. Later it could be shown that the greatest toxicity appeared to be in specimens collected early, when flow was scanty, and the least in specimens obtained when the bleeding was profuse. It was then discovered that the toxicity was directly proportional to the amount of endometrial debris; specimens collected during scanty flow at the start of menstruation containing the greatest proportional amounts of debris.

The pathological effect of menstrual toxin upon the immature rat was shown to be one of generalized tissue damage and pronounced vaso-constriction.

Macht notes that dermatoses are among the commonest lesions noted in connection with catamenia. These skin lesions include furunculosis, acne rosacea, herpes labialis, herpes zoster, urticaria, various forms of eczema, subcutaneous hemorrhage, erythema multiforme, erythema nodosum and localized patches of edema.

From Smith's more recent studies of the circulating blood of normal women at the time of menstruation it was found that it contains, in its euglobulin fraction, fibrinolytic and pyrogenic activity (the latter, as tested on rabbits). The same properties were also found in the venous blood of pregnant women suffering from late pregnancy toxemia.

CANCER OF THE PARANASAL SINUSES

Bruce Proctor, M.D.

Cancer of the paranasal sinuses comprises about 3 per cent of cancer of the upper respiratory and alimentary tracts. The reported five year cure rate of cancer in this region is appallingly low chiefly because these cases come to the otolaryngologist in an advanced stage of the disease. The medical profession as a whole should become familiar with the symptomatology, the diagnostic features, the clinical course and the general program of treatment in cancer of this region so that he can give intelligent advice to the patient and his family.

The initial symptom is usually swelling of the cheek, alveolar ridge, palate, orbital floor or bridge of the nose. Nasal obstruction and a bloody nasal discharge are common. Pain is usually absent unless sepsis appears. X-ray studies of the paranasal sinuses reveal erosion of bony walls. Metastases rarely occur. Death usually results from local tension of the disease, sepsis and hemorrhage.

Radiation therapy alone invaribly produces serious sequellae from radiation necrosis of bone and associated suppuration which eventually requires surgical drainage. Our best results are obtained with immediate surgical exploration and radical surgical excision of the involved structures. If, on exploration, complete surgical excision is not possible then adequate drainage should be provided and an anatomical avenue created for the possible insertion of radium into the center of the involved area. Residual deformaties may later be corrected with prosthesis or operative reconstruction ("plastic") procedures.

The experience encountered in eighteen cases will be reviewed.

SIGNIFICANT LESIONS OF THE ORAL CAVITY

Gordon R. Maitland, M.D.

This presentation includes lesions frequently seen in the oral cavity. Slides will be shown of soft and hard tissue involvement. The advantage of early diagnosis and treatment will be discussed.

ETIOLOGY OF BRONCHIAL ASTHMA

Leo H. Bartemeier, M.D.

Although William Osler classified bronchial asthma as a neurotic affection thirty-three years ago, the etiology of this disorder has not been satisfactorily explained. The contributions of psychiatry and psychoanalysis to the investigation of this problem are presented.

A Simple Threefold Voluntary Program

The American Medical Profession shares one belief with the "Fair Deal" Administration. We believe that every citizen is entitled to opportunity to protect himself from the economic catastrophe of serious illness. But understanding ends right there, for we believe that compulsory Federal distribution of medical care is absolutely incompatible with American Democracy. Our answer to the "planning" of the Federal empire-builders is a broad base of voluntary, privately sponsored hospitalization and medical service insurance; Michigan Medical Service may well prove to be the most important single measure proposed by our profession in the fight against political medicine.

Every dootor of medicine is aware that American standards of general medical care and professional skill are the highest in the world today. We know that this standard will be impossible if medical care becomes a political commodity for "free" distribution—in exchange for higher taxes and more votes. But we also know that this standard can be even higher, and the economic catastrophe of serious illness avoided in every case, with a simple threefold voluntary program:

(1) extension, with the encouragement of state legislation and of education, of voluntary hospital-medical service and insurance programs for the protection of the responsible majority of the public;

(2) sufficient expansion with state funds of medical school facilities to meet the needs of our increasing population;

(3) normal continuation of present state and local facilities for care of the medically indigent, who will always be with us.

The Blue Shield medical care protection of Michigan Medical Service, in conjunction with Blue Cross hospitalization service, is active proof that this program can be both feasible and adequate. The practicality and popularity of this coverage are evident in its continuing expansion and the many similar programs springing up in other states. It can accomplish, when expanded to its proper limits in conjunction with other private insurance plans, a basic third of a sound and inexpensive program of medical protection, without Federal regimentation, or more taxation or "something for nothing" nonsense.

It is noteworthy that the medical profession has proposed no hastily "planned" monstrosity but rather an expansion of existing facilities fashioned during years of operating experience.

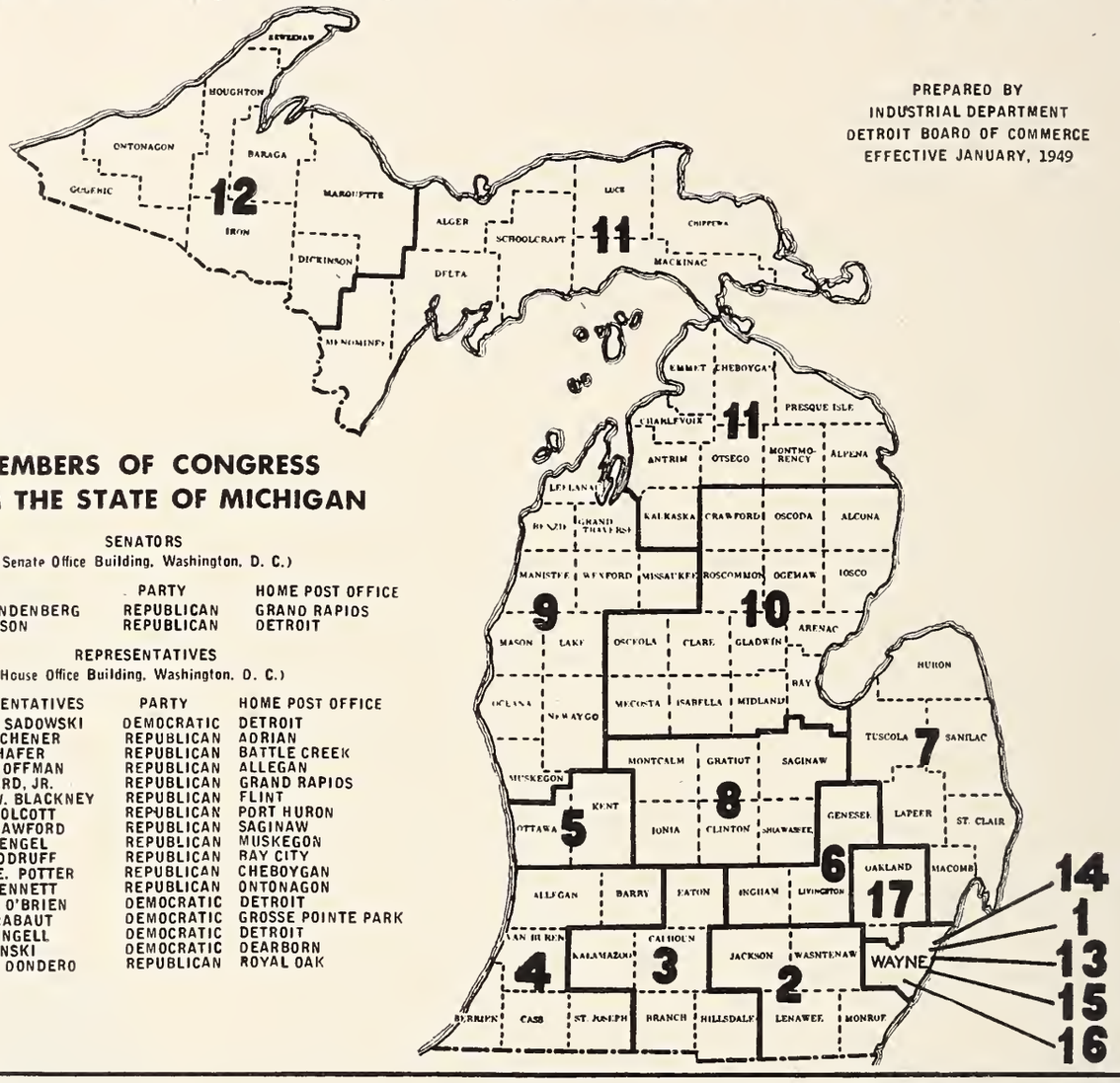
W. E. Barstow M.D.

President, Michigan State Medical Society

President's

Page

WHO IS YOUR CONGRESSMAN?



PREPARED BY
INDUSTRIAL DEPARTMENT
DETROIT BOARD OF COMMERCE
EFFECTIVE JANUARY, 1949

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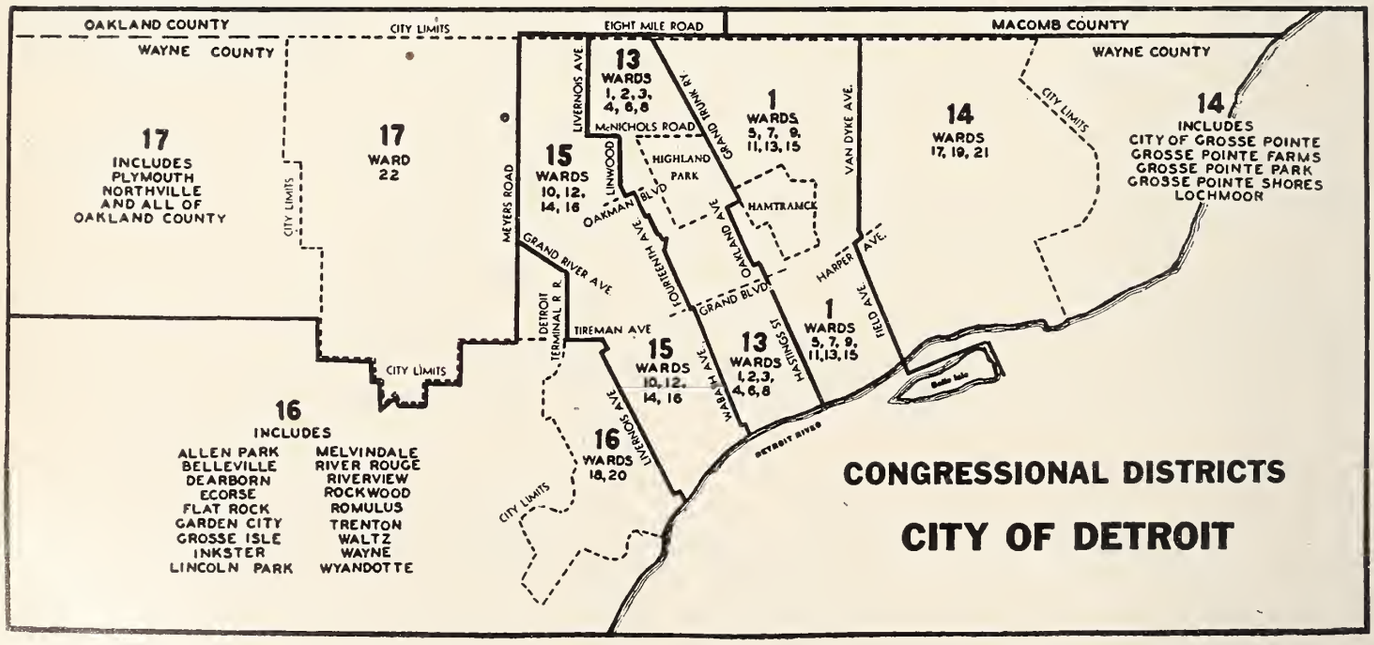

Editorial

ADRENOCORTICOTROPIC HORMONE (ACTH) AND CORTISONE

"WE, AS a profession, are just about to experience the greatest advance in medical therapy in history."

That was the introductory remark by O. C. Furstenberg, M.D., Dean of the Medical School of the University of Michigan, introducing Jerome Conn, M.D., to a medical group recently in Ann Arbor.

Dr. Conn is one of the research workers who is studying the effects of cortisone and adrenocorticotropic hormone. ACTH (Adrenocorticotropic hormone) is a hormone extracted from pituitary glands and has as its function the stimulation of secretions from the adrenal gland, one of the products of which is cortisone or a cortisone-like compound. ACTH is a pure protein hormone which has been crystallized, and if every particle of it from the pituitary glands in the meat industry were recovered, it would not be sufficient for one day's treatment of the rheumatoid arthritis cases now begging for treatment. At present ACTH is impossible to reproduce synthetically, but cortisone, a steroid hormone, is now being synthesized from a basic material found in ox bile.

The recent great advances in medical therapy, the chemotherapeutic substances and the antibiotics act against the invading organism which produces disease in the body, but cortisone seems to stimulate the body not to overcome infection, but to withstand its effects. ACTH and cortisone will apparently abolish clinical evidence of illness in a pneumonia patient with septicemia. The patient appears to be well, but the germs are circulating in the blood in great numbers. When the ACTH is stopped the patient again manifests the classical clinical signs of septicemia.

Researches on exactly what happens are going forward rapidly, and so we will probably learn many of nature's secrets, which so far have baffled us.

Cortisone was first mentioned in connection with its dramatic relief of rheumatoid arthritis, stopping the pain and joint inflamation within three of four days and allowing these patients to walk almost normally. It is not a cure, because when the drug is withdrawn the patient goes right back to his original state. Cortisone has been used in many of the other collagen diseases with the same success Its use in allergies is just as dramatic. Virus pneumonias and other virus hepatites respond. Poliomyelitis is now being studied intensively. Cortisone stops fibroblastic growth and dissolves fibroblastic tissue. Therefore, it impedes healing following surgery.

Cortisone is produced naturally when the pituitary is stimulated to release natural ACTH. Conditions which will produce bodily reactions, such as, shock, or a surgical operation, stimulate the defense mechanism of adrenal glands and produce cortisone. The reaction from this cortisone, naturally produced, is now understood to be the cause for the impeded healing recognized by surgeons for the first three days following surgery. This endogenous production of cortisone has not been appreciated, but has frequently been accomplished through our use of foreign proteins—typhoid vaccines, etc., in the treatment of various conditions such as iritis.

Cortisone gives apparent relief in a host of clinical abnormalities including Graves's disease, gout, acute glomerular nephritis within a very few days, but ACTH and cortisone are potentially harmful and should not be used over long periods of time. They are known to produce diabetes mellitus, hypertension, and various other disturbances long known to occur in Cushing's Syndrome. They cannot be used with diabetic persons. In such cases under control with insulin, complete insulin resisttance may occur, and all of the sugar ingested as carbohydrate plus that from protein metabolism may be recovered in the urine.

Researchers are now attempting to break down ACTH into simpler compounds and still retain its activity, and with some hope of success. The whole field of ACTH therapy is dependent upon stimulation of the adrenal cortex. Where adrenal function has disappeared, ACTH will not help. There is also evidence that personality disorders may respond to this treatment the same as they do to electric shock or the other shock therapies used in psychiatry.

A new field of medicine is developing. It is already the greatest advance in history. From studies being made, the future holds untold hopes. It is probably fortunate that the present supply of these drugs is so limited because their use carries such tremendous responsibility. They must be studied by trained research workers for a considerable time before they dare be made available for general use. The benefits are miraculous, but the whole story, including complications, has not yet been learned.

Dr. Conn was extremely enthusiastic about these new materials and especially about the new understanding of the functions of the body and its response to stimulus, but he cautioned against the premature use of these new remedies.

THE ROAD TO SOCIALISM

A SMALL GROUP of socialists in England in 1883 organized what they called the Fabian Society. It was their ambition to bring socialism to England but they knew it must be done by devious ways, not openly. They agreed never to use the term socialism, but to join or to foster any organization or movement which would promote socialist policies or welfare policies under other names.

This society became the political planning machine. It decided against state ownership of land and industry, but proposed state ownership of the great basic functions—electric power, transportation, basic metals—the balance of the economic system to be left in private hands, but under plans made by the state. To control the minds of the working class, society members entered the labor unions and formed what later became the great Labor Party. The Liberal Party was one of the dominant parties, so the Labor Party co-operated with them until they dominated the party. They agreed they must penetrate and capture the instrumentalities of public opinion and information—the writers, churchmen, the schools. They succeeded.

The Liberal Party came to power in 1905 under Herbert Asquith and Lloyd George. In 1914, the Labor Party had representatives in the British cabinet. Four years later, they were the official opposition party, having replaced the Liberal Party.

Their program has gone constantly forward, until now a socialist government controls England. The progress has been by infiltration, by advocating one welfare measure or one government control after another.

The British Fabian Society took advantage of the immense value of social reform in accustoming the citizens to look to the government for the correction of all their ills. Such, in brief, is the history of the socialist movement in England.

This whole program was accomplished in England bit by bit, by stealth, *without the people being aware* that the country was being socialized!

We have no Fabian Society in America, but for many years we have had ECONOMIC PLANNERS. We have had men who abhor the term "socialism" but who advocate constantly the benefits to be secured through a welfare state—who talk security for old age to be guaranteed by government.

The American nation was built upon the plan that the individual, through his own efforts, could provide for his present livelihood and his future well-being. The Social Economic Planners counterpart of the British Fabians, entered politics and chose the Democratic Party many years ago. We have all seen the "progressive measures" which changed the old States Rights Democratic Party into a national planning and control New Deal Party. People were taught to spend rather than save, to look to government for aid and help—to have "security" guaranteed to them. Finally, our Social Security act was placed upon the statute books, supposed to provide for the well-being of our working people who could no longer provide for themselves.

One of the first so-called benefits advocated by the Economic Planners was socialized medicine. They abhor the term "socialized medicine," as they abhor the term "socialism," but their program is socialized medicine, the same as their well-established agricultural program is socialized agriculture. The movement succeeded in Britain; the movement bids well to succeed in America.

If you are interested, and you should be interested, obtain immediately and read with attention "The Road Ahead"* by John T. Flynn, recently abstracted in *Reader's Digest*. There is so little time to save what is left of free Americanism. This bit-by-bit legislation with socialistic compulsion must be stopped.

*The Committee for Constitutional Government, Incorporated, 205 East 42nd Street, New York, N. Y.

MICHIGAN'S BLUE SHIELD—

THE MICHIGAN State Medical Society, through the Council and THE JOURNAL, is proud to celebrate the first ten years of achievement of Michigan Medical Service. Progress has been truly great. Had it not been for this youthful but stalwart bulwark for Americanism, we would undoubtedly have been submerged by this time.

In America, we are still free—still masters of our own destiny—thanks to a united and concerted effort.

Michigan Medical Service was a pioneer enterprise. Other than indemnity companies, no insurance company dared ten years ago to enter the peculiar field of offering voluntary prepaid health service because actuarial information was not available. Now, however, after a decade of leadership, the field is wide open and is being covered by many insurance companies. They do not have to fear failure on account of unknown risks. Now we and they have to guard only against being too overconfident.

The threat of socialized medicine is our greatest antagonist and one we must all join in opposing.

Many of our doctors tell us we have stood off the threat and can now rest. The awakening will be sad if because of our overconfidence we lose our private way of life. Some of our people, especially labor groups, have been demanding "security" and assurance of health service in case of serious illness. Michigan Medical Service was our answer to that demand. The success of this program was attested by our continued independent and private practice.

The reports contained in this number of THE JOURNAL are proof of united effort. But the political picture now demands continual and more uniform co-operation. We must extend our voluntary non-profit service plan to cover 75 per cent of our people instead of 25 per cent. When we have done that, the threat to *our* security will be ably met.

PREPAREDNESS

PHYSICIANS, more than any similar group of citizens, should appreciate the need of being ready for emergencies that may never occur. One may never have to do an emergency tracheotomy, but if the need for one arises there is no valid excuse that can be presented to the public for not knowing how.

God willing, Michigan may never have to experience atomic bombing or other catastrophes. But if such disasters should occur, an informed medical profession is the first line of civil defense. No amount of second guessing would satisfy the people of Michigan if we were unprepared.

We would hazard a guess that not one per cent of Michigan physicians have any more than a rudimentary knowledge of the treatment of atomic casualties. It is doubtful that any physician knows whether there are sufficient surgical supplies, dressings, narcotics, Penicillin, blood and plasma easily available to care for a major emergency. We know of no hospital that has an emergency expansion

(Continued on Page 728)

IN MEMORIAM

Patrick Liam Ledwidge, M.D., was born May 18, 1890 in Pinckney, Michigan, and was graduated from the Wayne University College of Medicine in 1920. He was a member of the Staff at Harper Hospital, Detroit, until the time of his death, had served for five years as Speaker of the Michigan State Medical Society House of Delegates, and in 1949 was President of the State Medical Society. Doctor Ledwidge was also a member of the Wayne County Medical Society, the American Medical Association, the American College of Physicians and the Detroit Academy of Medicine. He had been ill since September, 1949, and died April 15, 1950.

As expressed in the *Bulletin of the Muskegon County Medical Society,* "His death means more than that we have lost one of our past presidents. Pat was that rare type of individual, who while not blessed with great physical attributes, was a veritable giant in his infectious enthusiasm. He was one of those individuals to whom the gift of leadership was given in generous quantities. When important tasks were at hand, when tact and patience were a necessity, when a stout heart and ready wits were required, he could be counted on. Organized medicine has lost one of its most valuable members."

Michigan Medical Service

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Michigan Medical Service

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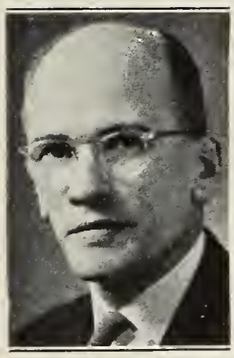

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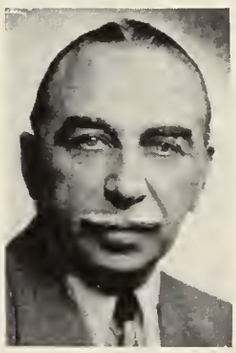

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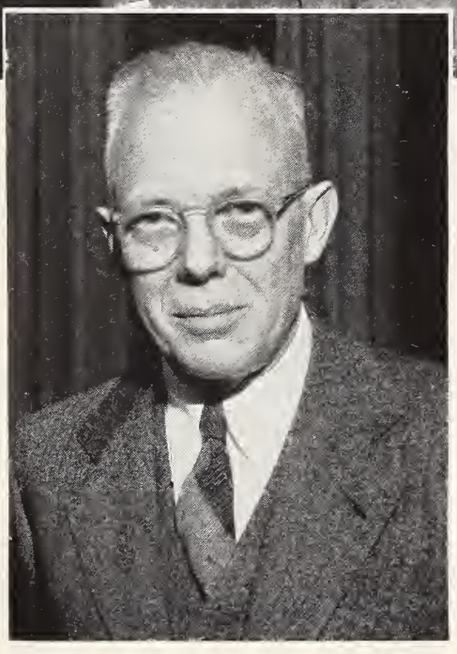

The First Ten Years

MICHIGAN MEDICAL SERVICE was ten years old March 1. 1950. By way of celebrating its tenth anniversary it paid $9,604,199 in medical and surgical bills for its subscribers in 1949. The total it had paid for services rendered its subscribers during the ten years of its existence stood, as of February 28, 1950, at $41,109,863.15.

To the 1,544,697 members of Michigan's Blue Shield Plan—approximately one-fifth of the State's population—these figures are significant. The nearly $10,000,000 in medical-surgical services they had received during 1949 cost no family more than $3.25 a month.

These figures are no less significant to 85 per cent of the state's doctors who are participating doctors in the Blue Shield program.

In concrete terms these figures tell the success story of an idea developed by the Michigan State Medical Society.

The origins of Michigan Medical Service go back to studies and efforts begun in the early 1930's by various County Medical Societies as well as the MSMS.

In Detroit, as early as 1933, the Wayne County Medical Society headquarters became the co-ordinating center for a plan that provided both medical and hospital care on an installment payment basis.

(Above)

Meeting of Michigan Medical Service Board of Directors and Staff, Hotel Statler, March 29, 1950.

(Center)

Three original Board members still serving and the President. Left to right: Wilfrid Haughey, M.D., Vice President of Michigan Medical Service; R. L. Novy, M.D., President of Michigan Medical Service; Philip Riley, M.D., and A. S. Brunk, M.D.

(Below)

Henry S. Hosmer was the first Detroit employe hired by Michigan Medical Service. He started on March 1, 1940, as chief accountant, a position he still holds.

Worked out by Dr. Ralph H. Pino, of Detroit, the plan made it possible for patients to pay for their hospital and medical care at the Society headquarters. The Society in turn distributed the money it received to each co-operating doctor and hospital.

The Michigan State Medical Society in 1931 published a survey on the cost of medical care in Michigan with a proposed prepayment voluntary mutual health service. Immediately thereafter a Committee of the Calhoun County Medical Society worked out a program to be put into effect in Calhoun County offering the public prepaid medical and hospital care service—a complete coverage, home, office and hospital. The date for its inauguration had been set and everything was ready to proceed when they were visted by an official from headquarters saying that our plan would violate the State Insurance Laws and could not be used.

Another Committee got to work and evolved a plan which later was turned over to the Council of the Michigan State Medical Society, and which was part of the foundation upon which Michigan Medical Service and Michigan Hospital Service were evolved; at about this same time Washtenaw County Medical Society made similar studies involving further research as to cost and utilization.

Experience gained from these early efforts led to the final decision to organize a state-wide prepayment plan. Various studies, which included an examination of the British Panel System by representatives sent to England for that purpose, encouraged the same decision.

On January 8, 1939, the House of Delegates of the Michigan Medical Society, meeting in Detroit, directed The Council to organize a voluntary, group medical care plan.

Less than two months later, on March 23, 1939, the Group Medical Care Enabling Bill, House Bill No. 215, was passed by the Michigan House of Representatives by a vote of 78 to 5.

The Council formulated the Michigan plan and presented it to the House of Delegates on September 18, 1939, in Grand Rapids. The delegates approved the plan by the record vote of 102 to 1.

On March 1, 1940, Michigan Medical Service began operations.

As it happened, no actuarial data was available for the program. Michigan Medical Service began by providing complete medical care, including medical services in the patient's home and the doctor's office as well as at the hospital. The cost for full family protection was set at $4.50 a month, a figure that seemed adequate and safe.

It was soon discovered, however, that the family premium of $4.50 a month provided revenue that barely covered half the actual cost of the medical-surgical services rendered the members. On top of that, despite the half-cost figure, public interest was negligible.

On the other hand, there was pressure from the public for protection against the cost of major illness, and in response Michigan Medical Service developed a program for surgical care in hospital cases.

By 1942, with continuing public apathy toward the complete medical care program, this original

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MICHIGAN STATE MEDICAL SOCIETY
2020 OLDS TOWER
LANSING, MICHIGAN

Michigan Medical Service

TO THE DOCTORS OF MICHIGAN:

The House of Delegates of the Michigan State Medical Society, on January 8, 1939, in Detroit, directed The Council to organize a voluntary, group medical care plan.

After months of careful deliberation, including thorough studies of voluntary medical service plans in various parts of this and other countries, The Council formulated and completed the Michigan plan, and again presented it to the MSMS House of Delegates on September 18, 1939 in Grand Rapids. The delegates approved the plan by a record vote of 102 to 1.

Since September, The Council and the Board of Directors of Michigan Medical Service have arranged all details and are now ready to inaugurate this important program which will be under the control of the medical profession.

The Board of Directors respectfully presents, herewith, the details of Michigan Medical Service, which is now ready for your participation.

The Board desires to begin actual operation of Michigan Medical Service by February first, and trusts that you will sign the enclosed application promptly and return to Michigan Medical Service, 2014 Olds Tower, Lansing. Members of the State Society are exempt from payment of the five dollar application fee, chargeable to non-members.

Thank you for your early response which will enable you to participate in the inauguration of your own voluntary group medical care plan.

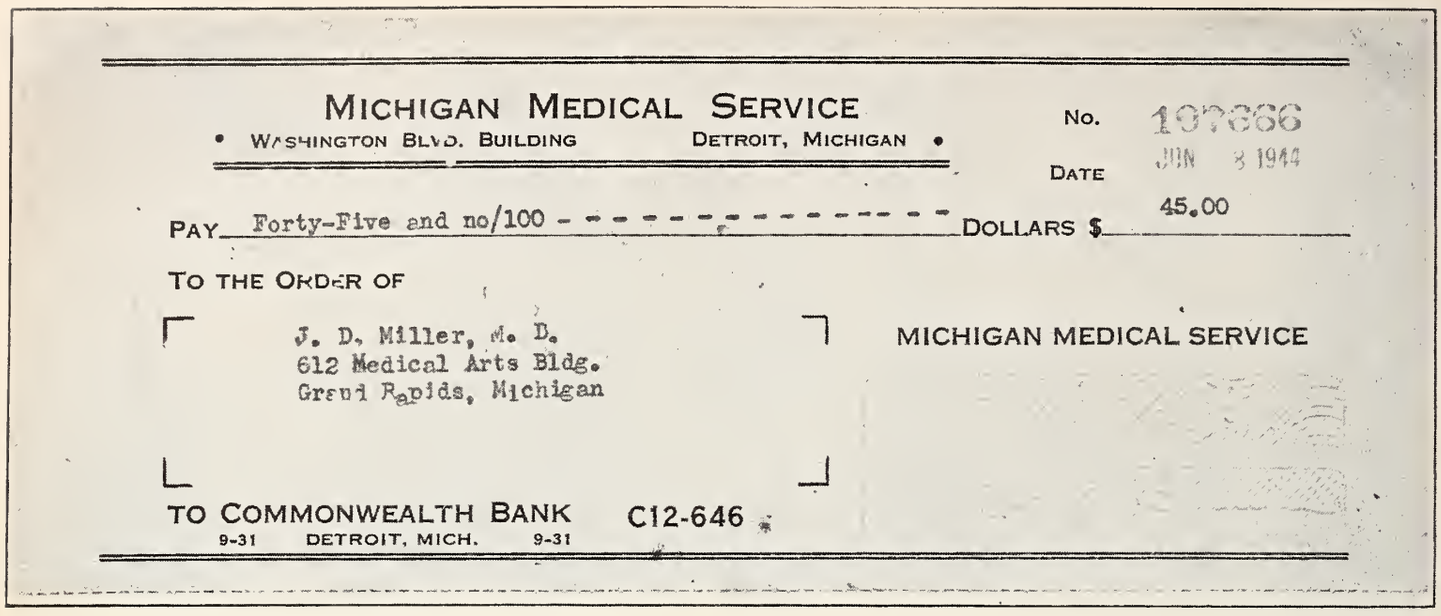
Fraternally yours,

MICHIGAN STATE MEDICAL SOCIETY

Secretary

Chairman of The Council

1940—Michigan's doctors were officially notified of the establishment of Michigan Medical Service in the February, 1940, issue of The Journal of the Michigan State Medical Society.



MICHIGAN MEDICAL SERVICE
• WASHINGTON BLVD. BUILDING DETROIT, MICHIGAN •

No. 197666
DATE JUN 3 1944

PAY Forty-Five and no/100 - - - - - - - - - - - - - - - DOLLARS $ 45.00

TO THE ORDER OF

J. D. Miller, M. D.
612 Medical Arts Bldg.
Grand Rapids, Michigan

MICHIGAN MEDICAL SERVICE

TO COMMONWEALTH BANK C12-646
9-31 DETROIT, MICH. 9-31

1942-1944—Condition of Michigan Medical Service, after 1941 losses, made it necessary to prorate final payments to doctors. Balances were paid off during 1944. Typical check to J. D. Miller, M.D., Grand Rapids, Councilor for Fifth District, covers supplemental payment of 20 per cent for services rendered in 1942.

program was discontinued. In the meantime, more than 350,000 persons had been enrolled for the surgical protection.

Within a few years it became apparent that although the people took no interest in a program covering doctor's services in his office and in the patient's home, they did want medical care protection in hospital cases. Michigan Medical Service consequently developed added protection of this type.

On September 1, 1948, all Michigan Medical Service certificates were liberalized to provide surgical care in doctors' offices and hospital out-patient departments where the established Blue Shield fee is $20.00 or more. A year later the medical-surgical certificates were liberalized, increasing the number of days of care in the hospital from 30 to 120 a year. An exception was made for tuberculosis, nervous and mental conditions, which continue to be limited to 30 days of care per certificate year.

The first few years of Michigan Medical Service's existence were, financially, lean years. Because there had been no actuarial data upon which rates could be based, the organization reached a deficit of $504,000 in 1942. Changes in procedures and two changes in rates, however, gradually liquidated the deficit, and by 1944 Michigan Medical Service began to recoup its financial position.

The year of 1949 saw an unpredictable utilization of the surgical benefits—an utilization which had been rapidly increasing since 1947—and in the spring of 1950 another rate increase was necessary.

Michigan's Blue Shield Plan operates as a companion organization to Michigan Hospital Service, the Blue Cross Plan, and until recently was commonly known within the state of Michigan as "Blue Cross" rather than "Blue Shield."

Subscribers to both plans are enrolled simultaneously, and enrollment programs are mutually developed. The majority of the subscribers to Blue Cross-Blue Shield are industrial and business employes, enrolled as groups at their places of employment. Other programs include the enrollment of farmers through their Farm Bureaus, Granges,

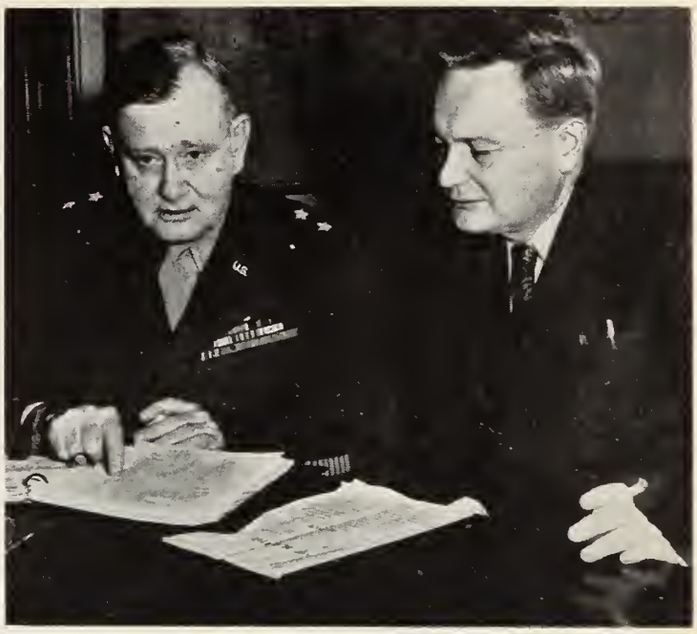
1945—Michigan Medical Service repays Michigan State Medical Society $17,544.45, loaned by the latter to cover original organizational and legal expenses. R. L. Novy, M.D., President of Michigan Medical Service, hands check to A. S. Brunk, M.D., Treasurer of Michigan State Medical Society.

farmer co-operatives and the Farm Security Administration. A program for enrollment of professional people is handled through professional organizations such as the Michigan State Bar, Michigan State Medical Society, the Michigan State Dental Society, and others.

A program of community enrollment makes the two services available to the self-employed and others who do not belong to established groups.

The existence of Michigan Medical Service has provided a convenient means for meeting the needs of veterans with service-connected disabilities. In Michigan thousands of veterans have been permitted to go to their own physicians rather than to a veterans' facility for examinations or treatments. Michigan Medical Service pays the doctors for these cases just as it makes payment for services provided to regular subscribers, and in turn, is reimbursed by the Veterans Administration. This system has not only helped relieve the great pressure on veterans' facilities, but has also made it easier for many veterans to receive needed care.

From March, 1946, to February 28, 1950, Michigan Medical Service paid $3,912,270.53 for medical and surgical services given veterans.



1946—General Paul R. Hawley, MC, then Chief Medical Director of Veterans Administration, and R. L. Novy, M.D., President of Michigan Medical Service, sign contract establishing Veterans Administration department.

1948—Michigan Medical Service, in 1948, won a special Blue Shield Commission award for being the first Blue Shield Plan to enroll one million members. Left to right, shown presenting the award at the Annual Blue Shield Conference, French Lick, Indiana: Paul R. Hawley, M.D., then Chief Executive Office, Blue Cross-Blue Shield Commissions, R. L. Novy, M.D., President of Michigan Medical Service, L. Howard Schriver, M.D., President of Blue Shield Medical Care Plans, and Jay Ketchum, Executive Vice President, Michigan Medical Service.

1949—Looking confidently ahead, Michigan Medical Service on April 1, 1949, bought the Burnham-Stoepel Building, Beaubien and East Jefferson, for its future home. MMS expects to occupy the building jointly with Michigan Hospital Service after April, 1953, when the leases of the present tenants will expire. Situated at the east end of the contemplated Civic Waterfront Development, the building consists of five stories and a basement and has 132,546 square feet of floor space.

In Retrospect

Changing Attitude of the Medical Profession

By R. L. Novy, M.D., President
Michigan Medical Service
Detroit, Michigan

THE FOLLOWING excerpts have been taken from proceedings of annual meetings of the House of Delegates of the Michigan State Medical Society, annual meetings of the Corporation of Michigan Medical Service and THE JOURNAL of the Michigan State Medical Society from 1939 to 1950:

1939

"The House of Delegates of the Michigan State Medical Society in special session approved the principles of voluntary group hospitalization and voluntary group medical service. It authorized The Council to proceed with development of detailed plans consistent with the adopted principles.

"Group Hospitalization, now in vogue in several states, allows a subscriber to purchase a given number of days of hospital services (exclusive of any professional services) for a moderate premium payment.

"Group Medical Service, an entirely new procedure, enables a subscriber to purchase units of medical service, such units to include all the services rendered by Doctors of Medicine in all the specialties.

"The action of the House of Delegates calls upon The Council to develop its plans in co-operation with the Michigan Hospital Association, labor, industry, agriculture, religious and educational groups, community councils and other interested groups. It is recognized as a joint responsibility of both the community and the medical profession to bring adequate hospital and medical services within the reach of the low-income group of the community.

"The medical profession is asked to recognize the importance of the adoption of the broad basic principles and to bear in mind that the development of the minute details is of lesser importance. In the development of details the interests of the patient and of the medical profession will at all times be guarded. Since The Council of the Michigan State Medical Society represents in a democratic manner the forty-two hundred members of the State Society, the latter's interests and views will be reflected in all deliberations."

"Mr. Speaker, I move that The Council be empowered to complete the present plan entitled 'Michigan Medical Service' and that The Council also be empowered to put this plan into operation. . . .

"I think most of us have been reluctant to harness the profession with a fixed fee schedule that will very likely become public property in a comparatively short period of time, and if there were some way that could be devised whereby we could get around that particular difficulty, I am quite certain that much of our reluctance in entering into this sort of plan could be eliminated."

(Motion was seconded)

"The Speaker: We are going to vote and if you are not satisfied, forever hold your peace."

(The question was put and the motion carried. Applause)

"On November 30, 1939, the Council transferred the task of inaugurating the medical service plan to the Board of Directors of Michigan Medical Service."

1940

On August 31, 1940, there were 67,449 subscribers enrolled.

"The Society agreed to furnish working capital of $10,000.00 to Michigan Medical Service, and have also advanced $6,760.68 additional for organization expense. This total of $6,760.68 is to be repaid to the Society when, as and if the earnings of Michigan Medical Service are sufficient."

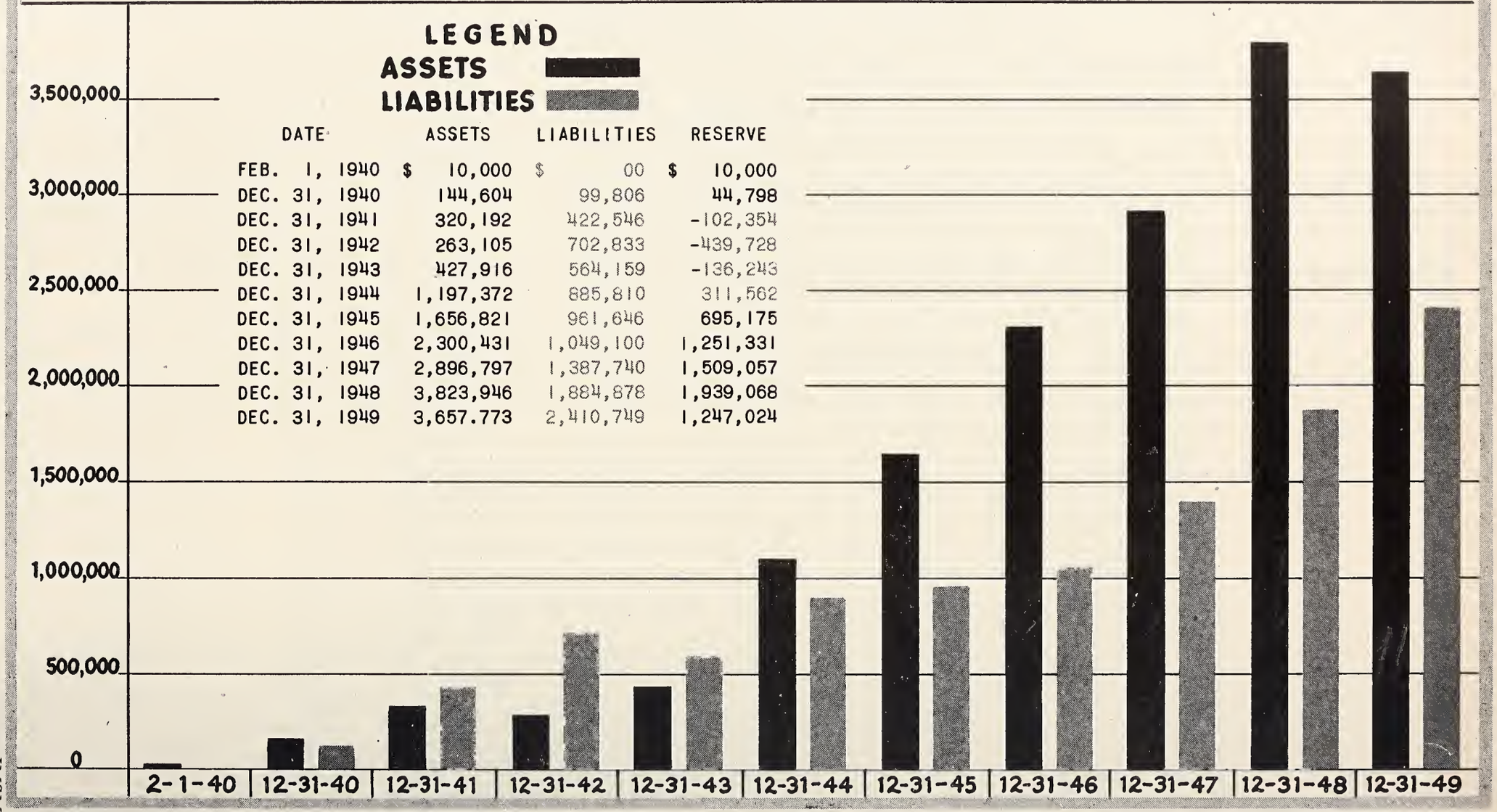
"Efforts on the part of lay groups through mutual benefit associations, co-operatives, trade unions, fraternal societies, and insurance companies to provide a method of paying for medical services on an insurance basis have not met the public demand for a medical service plan.

"In Europe, the activities of lay-organized medical insurance plans led to government health insurance which compulsorily enrolled the public and

MICHIGAN MEDICAL SERVICE

ASSETS AND LIABILITIES

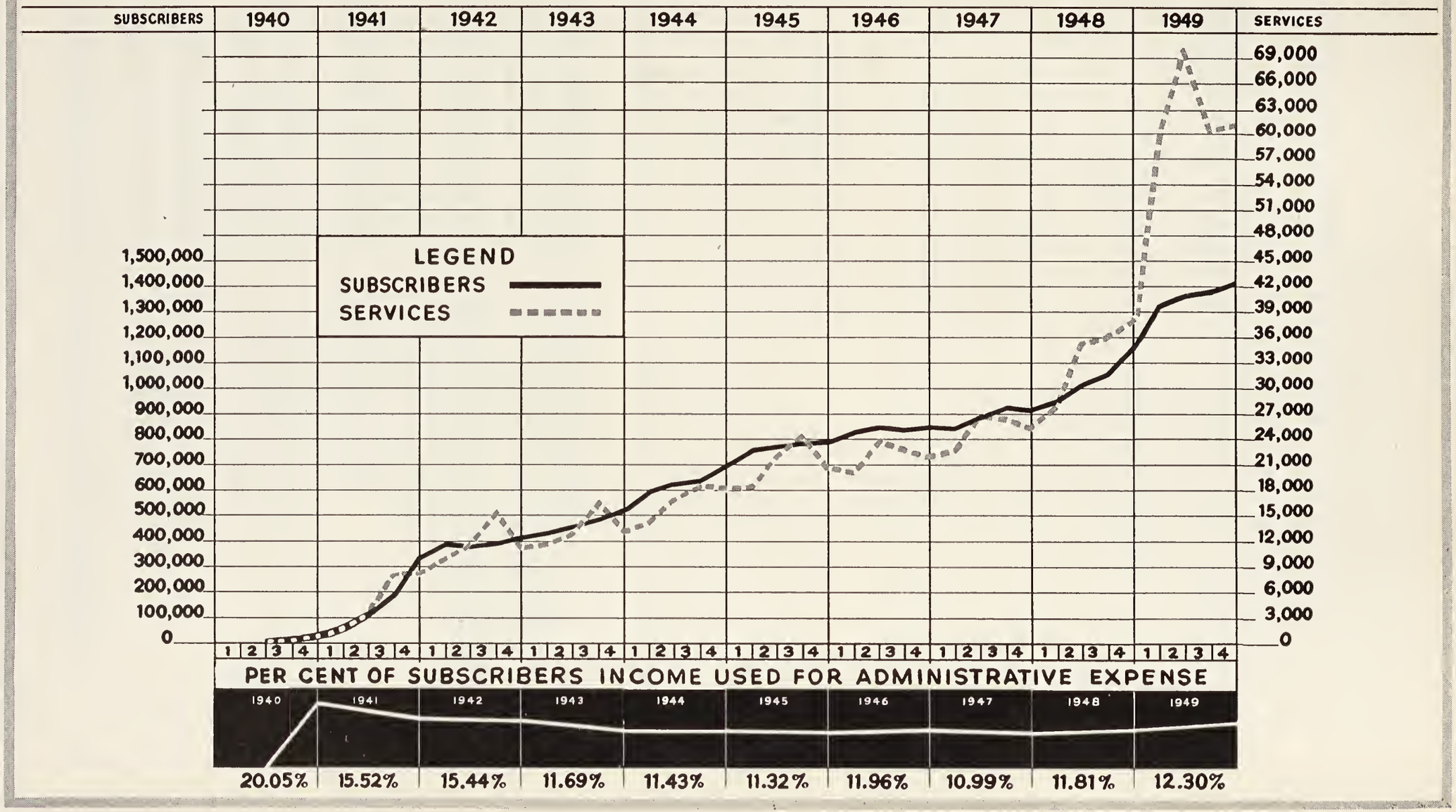
1940 TO DECEMBER 31, 1949



DATE	ASSETS	LIABILITIES	RESERVE
FEB. 1, 1940	$ 10,000	$ 00	$ 10,000
DEC. 31, 1940	144,604	99,806	44,798
DEC. 31, 1941	320,192	422,546	-102,354
DEC. 31, 1942	263,105	702,833	-439,728
DEC. 31, 1943	427,916	564,159	-136,243
DEC. 31, 1944	1,197,372	885,810	311,562
DEC. 31, 1945	1,656,821	961,646	695,175
DEC. 31, 1946	2,300,431	1,049,100	1,251,331
DEC. 31, 1947	2,896,797	1,387,740	1,509,057
DEC. 31, 1948	3,823,946	1,884,878	1,939,068
DEC. 31, 1949	3,657.773	2,410,749	1,247,024

MICHIGAN MEDICAL SERVICE

NUMBER OF SUBSCRIBERS AND NUMBER OF SERVICES—



left the lay organizations in control of the provision of benefits, including medical services. As a result in many countries, after sickness insurance systems had been established by law, the medical profession has now set about organizing voluntary medical plans in an effort to remedy the difficulties under lay-controlled systems for the provision of medical benefits.

"Fortunately in America in at least fifteen states the medical societies themselves have taken the initiative to organize medical service plans both as an antidote to commercial or governmental systems and to make certain that a professionally-controlled medical service organization will arrange for the provision of medical benefits."

"Within a period of six weeks, almost 60 per cent of Michigan's doctors of medicine have returned their Applications for Registration with Michigan Medical Service as an indication of their willingness to participate and provide services to subscribers."

1941

"The House went into Executive Session, and subsequently adopted the Report of the Reference Committee, re The Council Reports and also the St. Clair County Medical Society Resolution and the Genesee County Medical Society Resolution concerning dissolution of Michigan Medical Service.

"The House, as a whole, considered the Genesee County Medical Society Resolution concerning income limits of Michigan Medical Service, and referred this Resolution to the membership of Michigan Medical Service.

"The House, as a whole, considered the Genesee County Medical Society Resolution concerning limitation of presentation of Michigan Medical Service in certain counties, and adopted a motion that this Resolution be tabled.

"The House, as a whole, considered the Genesee County Medical Society Resolution concerning supervision of Michigan Medical Service in individual counties, and adopted a motion that this Resolution be tabled.

"The House, as a whole, considered the Resolution concerning a study by Michigan Medical Service of a limited liability certificate, amended the Resolution, and adopted it as follows:

"Whereas, Michigan Medical Service is a movement of national significance and of great sociological value, and

"Whereas, Michigan Medical Service was expected to go through a period of stress and strain, and

"Whereas, It now appears that new and different approaches may be used to make the service plan even more workable,

"Therefore, Be It Resolved, That the House of Delegates of the Michigan State Medical Society, representing the physicians of Michigan, recommend that Michigan Medical Service study (for comparative purposes) such new approaches as might be generally described as 'limited liability' service contracts and place same into operation if and when deemed advisable."

"The House, as a whole, considered the Resolution concerning personnel of Michigan Medical Service, and adopted it.

"Thereafter, the House of Delegates arose from Executive Session."

1942

"Can we afford to entirely abandon the idea of Michigan Medical Service, or should we modify it? These are questions that must be answered by this House of Delegates. Let's have frank and friendly discussion right here in open meeting, so that when this 77th session is over, regardless of what decisions shall have been reached, peace and harmony between the various members and groups of members of our splendid State Medical Society shall again prevail.

"The enrollment of Michigan Medical Service was 422,403 as of July 1, 1942. A total of 3,543 doctors of medicine are registered with the corporation to supply service to subscribers. Services have been provided in more than 78,152 cases, and payments in the amount of $2,488,811.45 have been paid to doctors for these services. More complete data and financial reports will be presented to the members of Michigan Medical Service at its meeting tomorrow (September 22, 1942)."

"We feel we should not be dictated to as to the fees we charge our patients by a House of Delegates, either acting here or in session as Michigan Medical Service, representing medical men, x-ray men, hospital physicians, and so forth, who are not doing much of any, if any, surgery. We feel they should not try to decide for us, in these large industrial counties where eighty per cent or more of our patients are in this insured group, what we have to accept. We don't consider that as fair.

"The early, original concept of Michigan Medi-

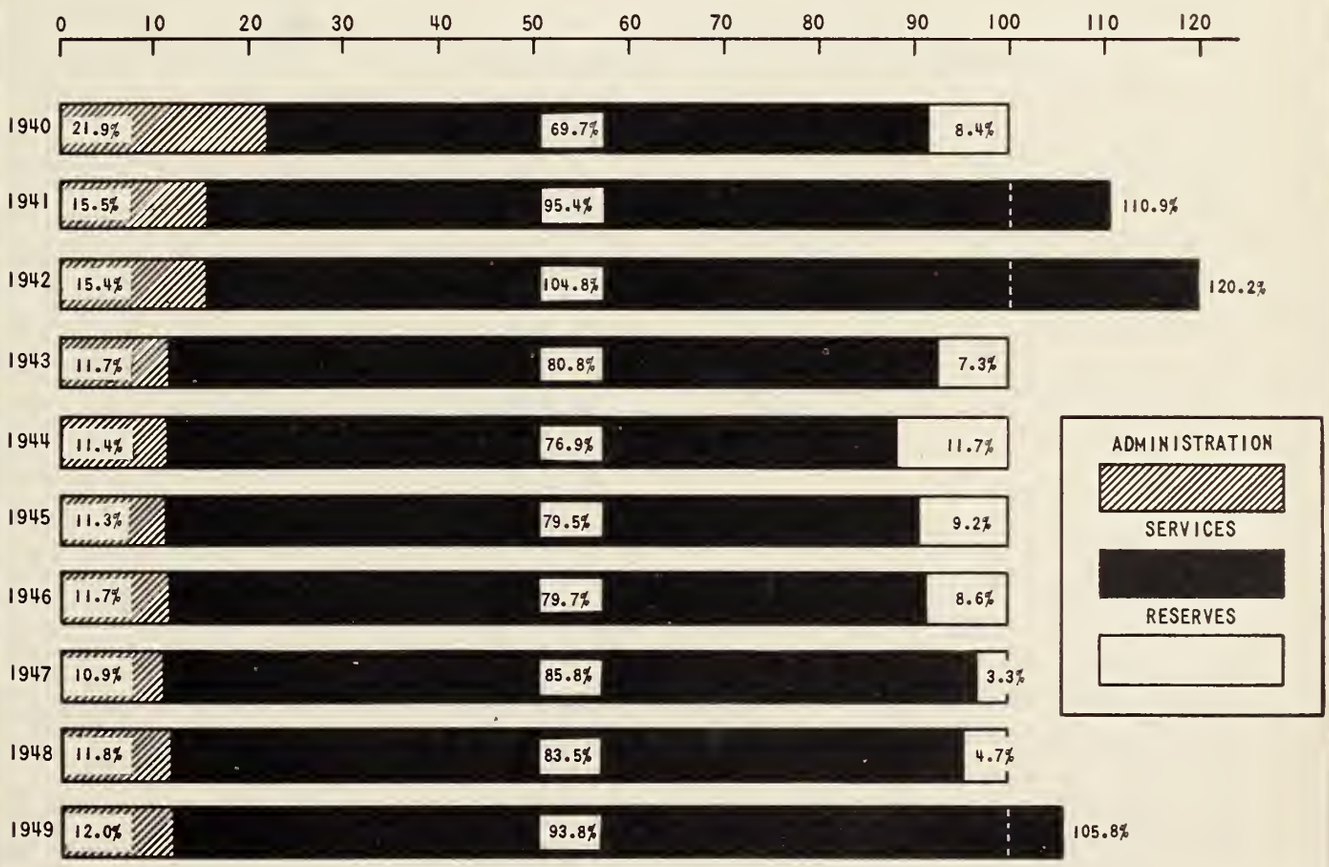
MICHIGAN MEDICAL SERVICE

PERCENTAGE OF INCOME USED FOR OPERATING EXPENSES, PAYMENTS TO DOCTORS AND RESERVES

YEARS 1940 THRU 1949

Year	Earned Income	Operating Expenses	Payments to Doctors	Gain or Loss *
1940	$ 363,438.12	$ 79,488.96	$ 253,303.00	$ 30,646.16
1941	1,110,302.10	172,073.80	1,059,048.17	120,819.87 Dr.
1942	2,455,552.38	378,293.54	2,573,110.82	495,851.98 Dr.
1943	3,367,290.86	393,766.17	2,720,071.45	253,453.24
1944	4,517,774.26	515,921.69	3,475,263.35	526,589.22
1945	5,420,350.85	610,907.47	4,308,285.18	501,158.20
1946	6,424,966.57	748,961.92	5,119,848.80	556,155.85
1947	7,861,842.69	859,970.75	6,744,145.04	257,726.90
1948	9,028,492.77	1,061,839.00	7,536,643.74	430,010.03
1949	11,836,621.39	1,420,581.91	11,108,083.18	692,043.70 Dr.

* These figures present the increase or decrease in reserves by years.



cal Service was to take care of the low income group. I feel that $2000 and $2500 is comfortable income, and not low income. . . .

"Now, this is not an effort, as we have been accused of trying to kill or get rid of Michigan Medical Service. We are merely trying to get back to the basic principles. If there is a definite demand for it, it will go on and exist, or it will fail if there is no demand for it.

"You don't know, and I don't know, whether it is possible to carry on Michigan Medical Service on a $1500 and $1200 income group, because it has never been tried. I will grant you that the $2000 and $2500 limit was established by the House of Delegates. It is our mistake. Let's rectify it.

". . . Can't we get back to running the State Medical Society and get out of the insurance business?

"The full Medical Service Plan must be written with very adequate safeguards and controls and must be written at a rate which at the present time I do not believe the public is ready to pay. This may come; it will come through gradual education and through a more limited plan—surgical; surgical and medical in the hospital; until ultimately the public desires full medical coverage.

"We listen to the increase in the rising cost for labor; listen to increase in everything else. Where's the increase in our wages? We have been producing; we hear that there was an increase in the policy payment but we haven't seen that there was an increase in the payment to the doctors.

"Motion as amended that the Board of Directors be instructed to completely and absolutely divorce Michigan Medical Service from any participation or association directly or indirectly with Michigan Hospital Service, consistent with sound actuarial procedure."

1943

"Resolved, That the House of Delegates of the Michigan State Medical Society does hereby instruct and require those members of the Michigan State Medical Society who constitute a majority of the Directors of the Michigan Medical Service to, individually and collectively, immediately take such steps as are necessary to change the Michigan Medical Service from a type of service organization to a medical insurance corporation; whereby indemnities may be paid directly to the patient policyholder on a partial indemnity basis and not paid as direct subsidy to the physicians of the State of Michigan.

"Resolved that it is the sense of the House of Delegates of the Michigan State Medical Society, at their annual meeting in Detroit, September 20, 1943, that Michigan Medical Service shall cease and desist from paying any further monies or equivalent thereof to any practitioner other than legally licensed and registered Doctors of Medicine, and further be it

"Resolved That those members of the Michigan State Medical Society who are Directors of the Michigan Medical Service and who constitute a majority of the Directors thereof, are hereby instructed and required, individually and collectively, to take such action as Directors of Michigan Medical Service, as to fully comply with the above instructions of the House of Delegates of the Michigan State Medical Society."

"Now, if it is the price of the continuation of the Michigan Medical Service that we pay osteopaths and others, let's note in the early days of the Michigan Medical Service, the principles under which it was established were sacrificed to that expediency. Such is always the demand of business.

1944

"A special committee was appointed by the Council to study and report on this proposal to limit Michigan Medical Service to Doctors of Medicine.

"If this Resolution were adopted, it would put Michigan Medical Service out of business. Michigan's successful program of group medical care cannot survive if such peremptory action is taken at this time. The problem outlined in the Resolution was not created by Michigan Medical Service; it represents an ever-increasing growth over the years, that is a problem of medicine, for the profession to solve. If you desire Michigan Medical Service, which is our only telling answer to federalization and regimentation, to continue as your bulwark, this resolution should be tabled and in its place specific authority to test the legal rights of certain practitioners—the test to be timed for the most propitious moment—should be granted The Council.

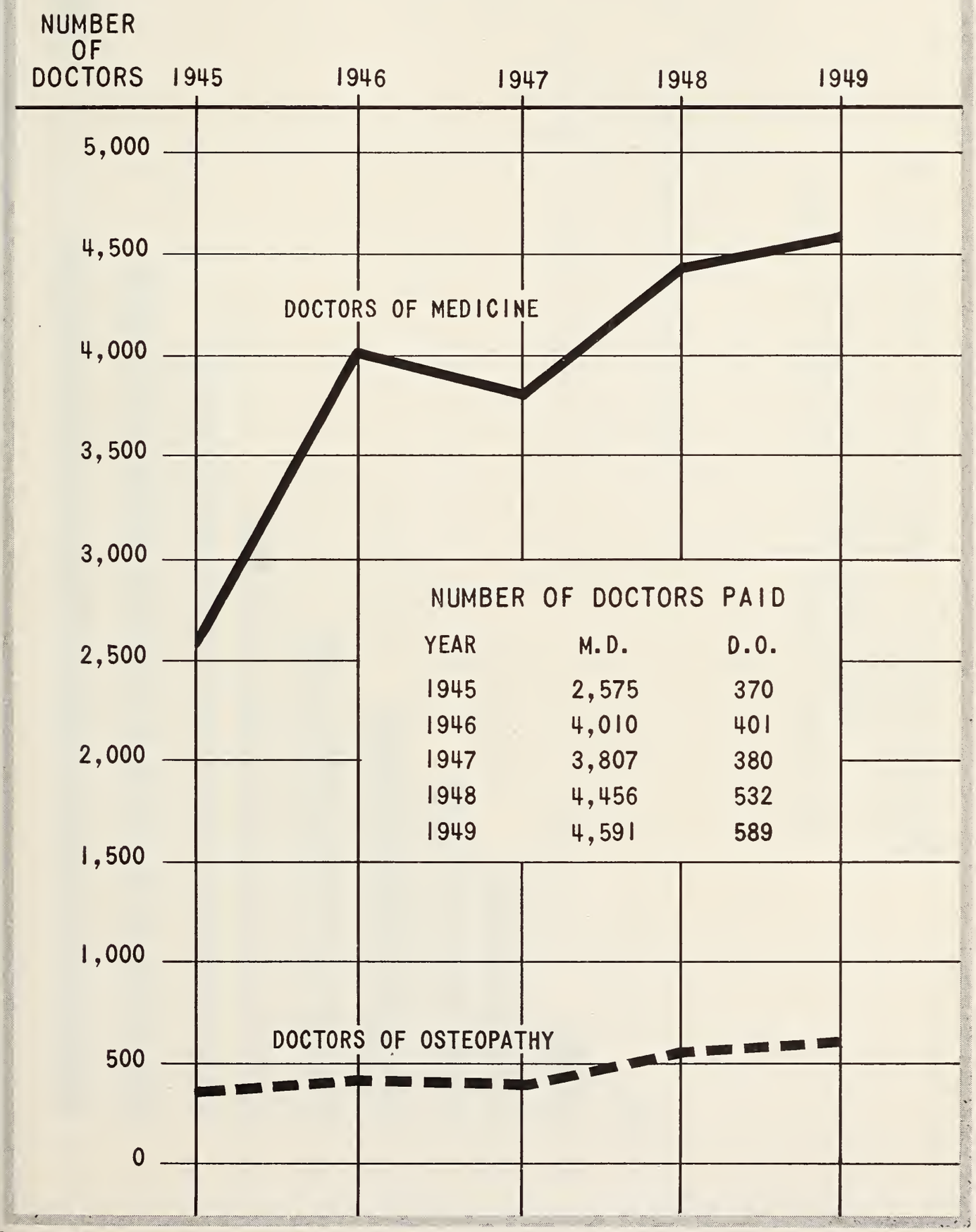
1945

Uniform Fee Schedule for Governmental Agencies.

"The Special Committee appointed to develop

MICHIGAN MEDICAL SERVICE

NUMBER OF DOCTORS PAID
1945 through 1949

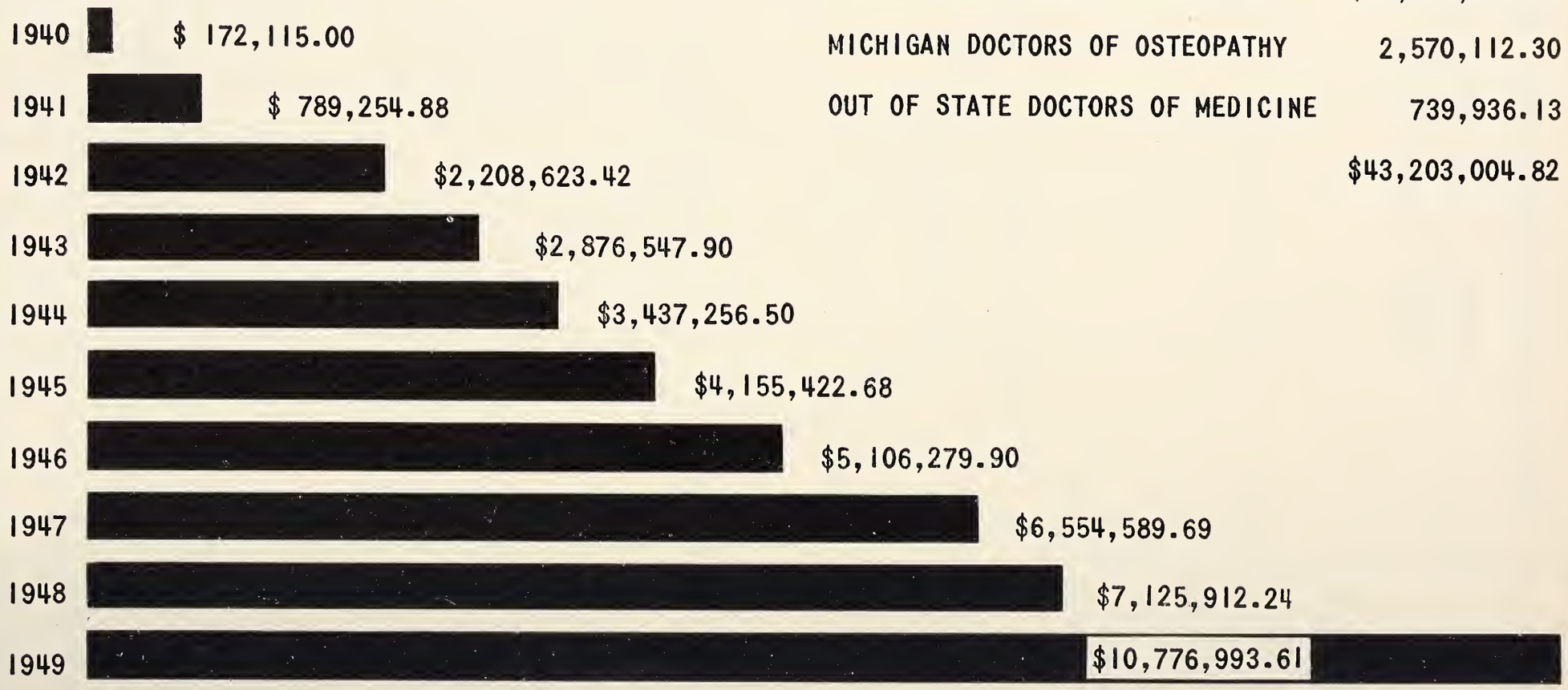


NUMBER OF DOCTORS PAID

YEAR	M.D.	D.O.
1945	2,575	370
1946	4,010	401
1947	3,807	380
1948	4,456	532
1949	4,591	589

MICHIGAN MEDICAL SERVICE

Paid to Doctors For Services
By Years Inception to December 31, 1949



TOTAL AMOUNT PAID	
MICHIGAN DOCTORS OF MEDICINE	$39,892,956.39
MICHIGAN DOCTORS OF OSTEOPATHY	2,570,112.30
OUT OF STATE DOCTORS OF MEDICINE	739,936.13
	$43,203,004.82

this proposed fee schedule met on September 9 and reviewed 25,000 items in 121 individual fee schedules submitted by county medical societies, hospital staffs, and specialty societies of the State. The Special Committee arrived at a Uniform Fee Schedule for Governmental Agencies which it feels is fair to all parties concerned: first, the patient, second, the doctor of medicine who renders the service or commodity, and, third, the officials responsible for providing medical care to wards of government and to indigents.

"The Council recommends that the House of Delegates adopt the Uniform Fee Schedule for Governmental Agencies, subject to its final approval by the Special Committee which shall review and adjust any controversial items within the next thirty days; and that the House of Delegates authorize The Council to declare the Uniform Fee Schedule for Governmental Agencies in effect and operative upon receipt and approval by The Council of the final report of the Special Committee."

"Resolved, That the House of Delegates of the Michigan State Medical Society urgently request every doctor of medicine in this state to recognize the values to his patients and to himself of Michigan Medical Service, that every physician endorse the service and become a subscriber (policy owner) thereof, and further, that every practitioner of medicine constantly spread the word concerning the advantages of the voluntary, medical-society-sponsored program of group medical care to all his patients, friends and acquaintances, to the end that the protection of Michigan Medical Service is available to all persons in this State, thus obviating any desire or need for bureaucratic medicine."

Uniform Fee Schedule for Governmental Agencies.

"This involves a step in a changed attitude of the profession. . . . The Council recognized that the changing times are such that recognition of the problem of wards of government is imperative. . . . The returning veteran is the outstanding example of a ward of government."

"When the Council entered into this activity which Dr. Novy headed up, it realized that there were certain governmental categories of people who were and would be thrust upon you without your having anything to say about their determination. It is not a question of indigency. It was not a question of any one group. It is a question of all of these governmental categories which are growing rapidly."

"It is either a question of accepting this fee schedule, which is infinitely better than anything that is in vogue in any of these categories, or turning it down and still having your categories, whether you like them or not, and taking the inadequate, paltry fees that are given.

"It is a question of raising to a decent level the fees for these groups that are going to exist. We have no control over the setting up and the establishment of government categories. It is not just an indigent category. It is any category that is paid for by some governmental agency.

"It has nothing to do with our private practice. It has nothing to do with anything in our private way of doing business. It is for the groups that we must treat, whose economic determination is made by somebody else, and who are with us whether we like it or not. So it is a question of getting a more adequate fee for those people for whom the government is going to pay the bill, or say we will throw down the schedule of fees and will accept what these governmental people will give us, which is always below cost.

"That explains, I believe, the attitude of The Council in trying to arrive at something more equitable for these established groups which we are bound to have."

"Resolved, That the component and district medical societies in this state, and the individual members thereof, be urged to assume the important duty of integrating the American Medical Association Program in their own areas so far as it applies to them, and that each component society be requested to reserve time at one of its early meetings for an analysis of the Fourteen Points in the American Medical Association's Constructive Program for Medical Care."

1946

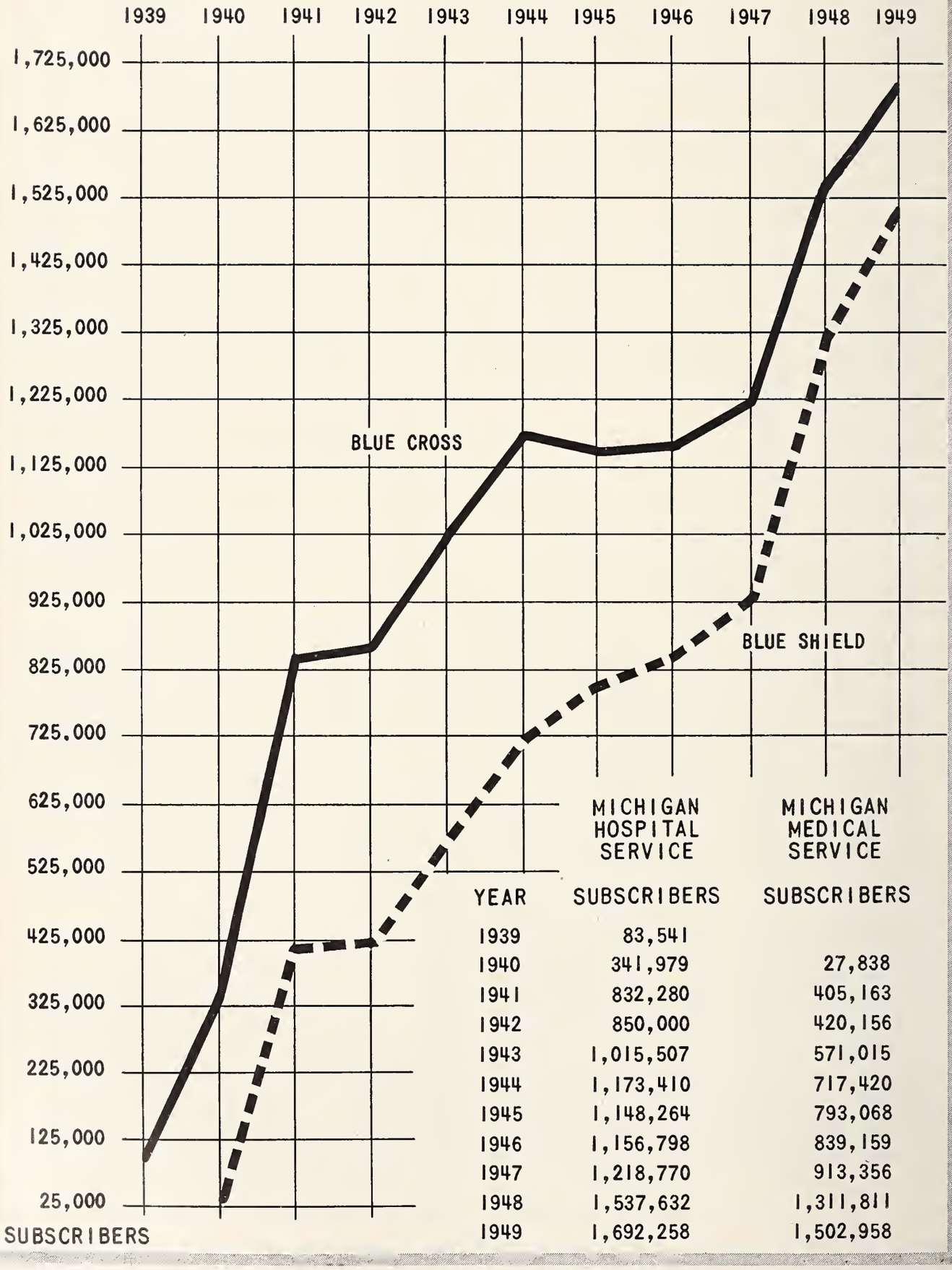
Resolutions on Medical Care of Veterans

"Whereas, The Veterans Administration of the United States, through its medical director, Gen. Paul R. Hawley, has expressed need for assistance and has repeatedly requested aid of organized medicine in providing medical care for veterans; and

"Whereas, The Michigan Medical Service, an organization founded and sponsored by the Michigan Medical Society as a medium of affording the people of Michigan voluntary low cost medical care of good quality; and

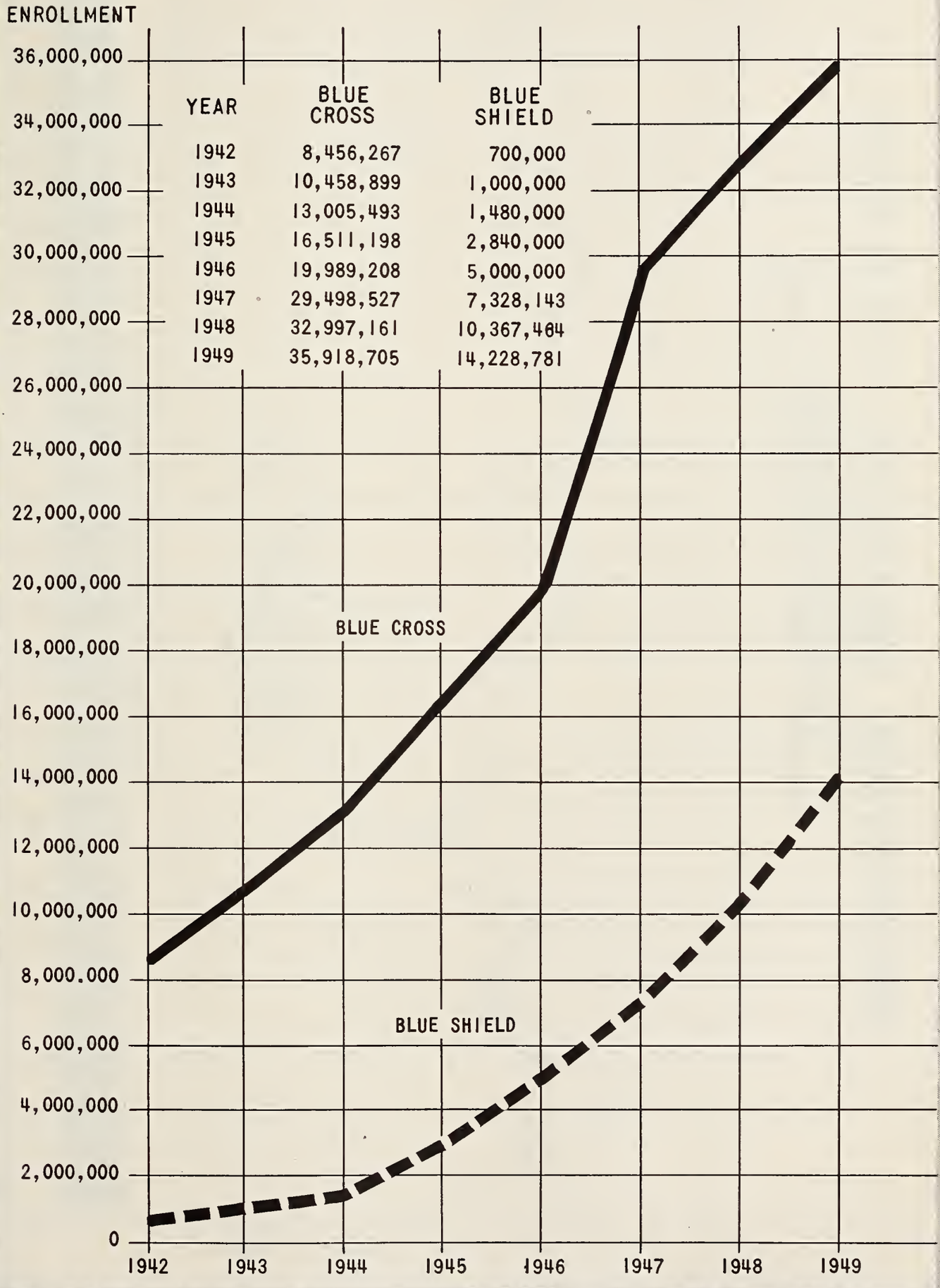
GROWTH OF

Michigan Hospital Service and Michigan Medical Service
Inception Through December 31, 1949



YEAR	MICHIGAN HOSPITAL SERVICE SUBSCRIBERS	MICHIGAN MEDICAL SERVICE SUBSCRIBERS
1939	83,541	
1940	341,979	27,838
1941	832,280	405,163
1942	850,000	420,156
1943	1,015,507	571,015
1944	1,173,410	717,420
1945	1,148,264	793,068
1946	1,156,798	839,159
1947	1,218,770	913,356
1948	1,537,632	1,311,811
1949	1,692,258	1,502,958

GROWTH OF BLUE CROSS AND BLUE SHIELD
COMBINED ENROLLMENT ALL PLANS

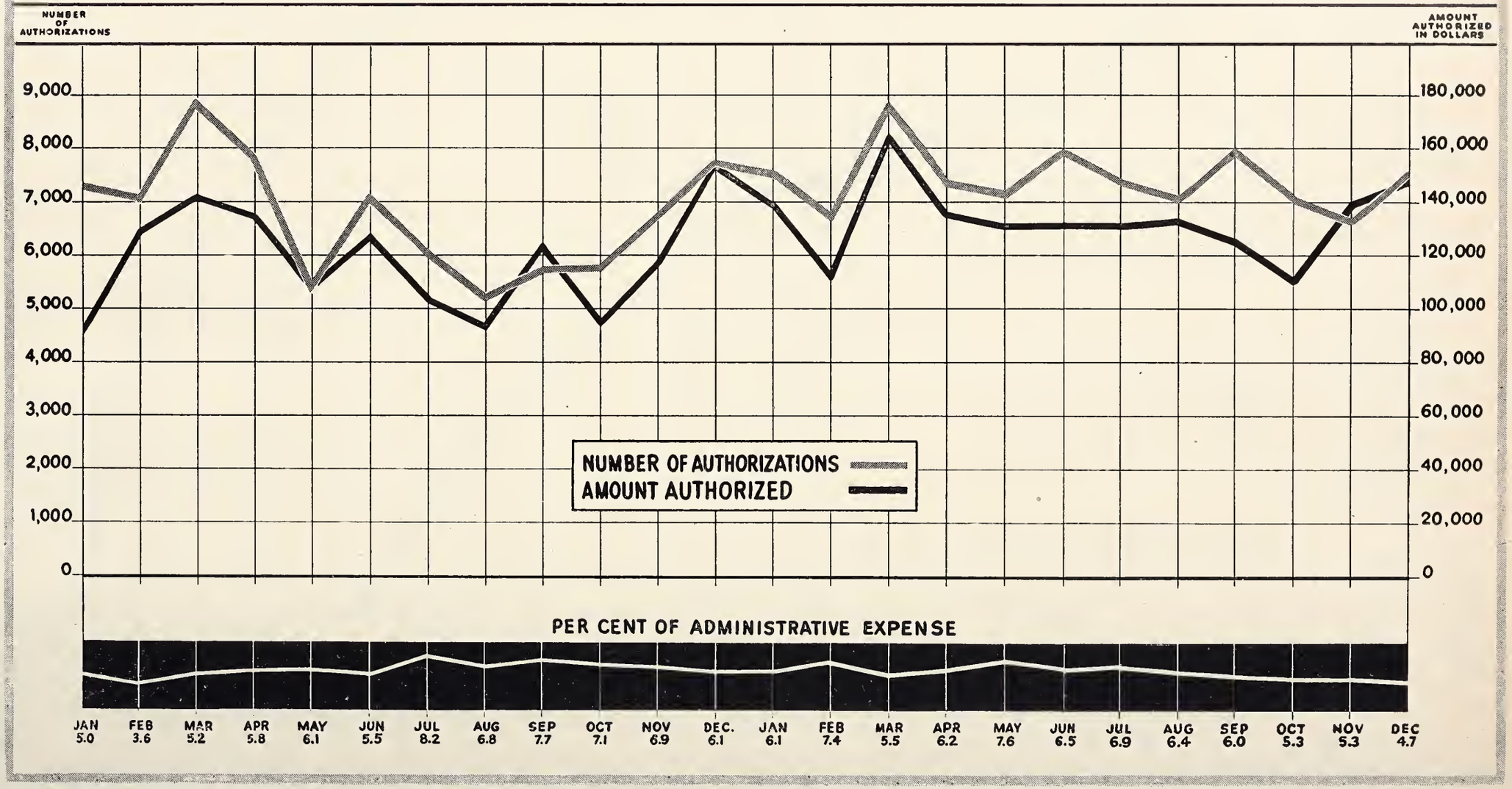


YEAR	BLUE CROSS	BLUE SHIELD
1942	8,456,267	700,000
1943	10,458,899	1,000,000
1944	13,005,493	1,480,000
1945	16,511,198	2,840,000
1946	19,989,208	5,000,000
1947	29,498,527	7,328,143
1948	32,997,161	10,367,464
1949	35,918,705	14,228,781

MICHIGAN MEDICAL SERVICE

VETERAN'S PROGRAM

JANUARY 1, 1948 TO DECEMBER 31, 1949



"Whereas, The medical care to be furnished through Michigan Medical Service is to be rendered by physicians freely chosen by the individual patient; and

"Whereas, The physicians so rendering medical care are to be compensated on a fee for service basis and to be paid directly by Michigan Medical Service; and

"Whereas, Michigan Medical Service has entered into a contract with the Veterans Administration for the care of veterans in the state of Michigan suffering from service connected disability; and

"Whereas, The arrangement not only provides the Michigan veterans with good quality medical service for service connected disability with choice of home town doctor of medicine but as well provides the American public generally with a demonstration of the willingness and ability to provide a practical workable answer to this and similar problems of provisions of medical care without compulsory means or political controls and is productive of good public relations for the medical profession as evidenced in *Colliers* May 11, 1946, and condensed in the *Reader's Digest* July, 1946, therefore be it

"Resolved, That the House of Delegates recommend the Michigan or similar plans for the medical care of veterans to the various state associations and urge them to adopt plans so that good medical care be furnished to the veteran in his house community by the physician of his choice; and be it further

"Resolved, That the House of Delegates instruct The Council on Medical Service and Public Relations to use its influence and facilities to the states and Veterans Administration in the formulation and activation of these plans."

"Whereas, The Michigan Medical Service and the Michigan Hospital Service, jointly, known to the public as the Michigan Blue Cross Plan, is the largest voluntary organization offering a prepayment medical and hospital insurance service in the United States and includes over one-fourth of all subscribers to such plans in the United States, and

"Whereas, The Michigan Medical Service and Michigan Hospital Service, the Michigan Plan, because of its size and the publication of its activities, has become a recognized leader of such plans by the public, and

"Whereas, Any failure or division in the Michigan Plan at this time could only encourage and perhaps promote the passage of Federal Social Legislation, to the detriment of the health of the people of this nation, and therefore becomes of paramount importance to every doctor in Michigan, therefore, be it

"Resolved, That every effort be made to further the successful mutual co-operation of Michigan Medical Service and Michigan Hospital Service."

(Adopted)

1947

Definition of Medical Services in MHS Contract.

"Whereas, the services of the pathologist, roentgenologist, anesthesiologist and physical therapist are medical services, and

"Whereas, Michigan Hospital Service wrongfully offers two of these services (pathology and anesthesiology) to the public as benefits under hospitalization insurance policies, and

"Whereas, Michigan Hospital Service, the Blue Cross plan covering the State of Michigan has failed to discontinue this practice and has in fact encouraged the practice of one of these specialties (anesthesiology) by laymen, and

"Whereas, the House of Delegates of the American Medical Association has gone on record as strongly disapproving this practice of encroachment; therefore, be it

"Resolved, That the Medical Society of the State of Michigan, through its House of Delegates, reaffirms its disapproval of this practice; and be it further

"Resolved, That this House of Delegates instruct our representatives on the Board of Trustees of the Michigan Hospital Service to oppose this encroachment on the private practice of medicine; and be it further

"Resolved, that the Secretary of the Michigan State Medical Society be instructed to notify each county medical society of this action, and advise the medical boards and individual members thereof of the importance of establishing in their hospitals the principle that the practice of pathology, roentgenology, anesthesiology and physical therapy is the practice of medicine and not a hospital service; and that the hospital board of directors be asked to discontinue the inclusion of these medical services in any contract for hospital services."

1948

Speaker's Address:

"We have the largest Blue Shield enrollment in the nation, but we still cover only one-sixth of the people under Michigan Medical Service.

"The dangers that threaten the free practice of medicine in this country are fast becoming critical, and still we delay in uniting in decisive action to meet them.

"We have thus far done no more than fight a series of rear-guard actions with small unorganized and unco-ordinated groups. I know of no more certain road to disastrous defeat."

President-Elect's Address:

"By the simple fact that the doctors of this country have shown real interest in the welfare of the patient, and have developed, and put into operation, our Blue Cross-Blue Shield Plans for taking care of costly illness, we have repeatedly postponed the possibility of the implementation of political medicine.

"In doing so, we, as a medical profession, have accepted a great public trust, one which is national in scope. To justify this public trust, there still remain many things to be done. We must tell the people about Blue Cross-Blue Shield, pointing out its many advantages over compulsory schemes for providing medical care and commercially developed plans. It is imperative that a much greater enrollment of subscribers be obtained in the very near future. There must be a closer association between state plans with the development of a uniform policy for the large industrial purchaser. Greater efforts must be put forth to sell our own doctors on the ideology and advantages of Blue Cross-Blue Shield; they must become participating physicians. And, finally, the American Medical Association must be urged to put forth greater energy in support of these plans."

"Union leaders insist that none of the existing plans are satisfactory because they do not give the worker complete sickness protection. Should we, as a medical profession, attempt to develop a medical care plan which is more acceptable to the union? Such plans would involve higher income limitations, possibly $4,000 increased costs to the worker and employer, and consequent increased payments to physicians, possibly 50 per cent above the present fee schedule. This requires considerable study, especially in view of the fact that the ultimate objective of union officials is a compulsory governmental tax-supported system of medical care.

"There was considerable discussion regarding a proposed Blue Cross-Blue Shield Association and Blue Cross-Blue Shield Health Service, Inc. The subject of expanding the present Blue Cross Commission and expanding Associated Medical Care Plans Commissions (Blue Shield) has been under consideration for some time. The problem of furnishing a uniform contract to national employers has also been under consideration for many years. Blue Cross-Blue Shield Association and Blue Cross-Blue Shield Health Service, Inc., pamphlets were furnished all the members of the corporation. After considerable discussion, on motion made these matters were tabled, leaving it in the hands of the Board of Directors."

1949

"The Committee reviewed the report contained in the Supplemental Report of The Council having to do with certain changes to be recommended by the House of Delegates to the Michigan Medical Service. The Committee approved the report, and recommends the adoption of the following recommendation:

'(a) That the income limits in the Michigan Medical Service policy be increased to $5,000.

'(b) That the schedule of fees or benefits paid by Michigan Medical Service be increased approximately 40 per cent.

'(c) That Michigan Medical Service provide that all hospital services of physicians, both medical and surgical, be included as benefits.

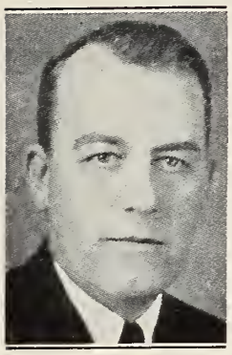
'(d) That Michigan Medical Service continue all the present forms of contracts affecting the $2,500 income limits.' "

(The motion was severally seconded, was put to a vote and carried unanimously.)

On January 16, 1950, the Council authorized a survey to determine fees for a $5,000 contract. Michigan State Medical Society Fee Schedule Committee met on March 19, 1950. The Michigan Medical Service Board of Directors, on March 29, referred the matter back to the Medical Advisory Committee. The Medical Advisory Committee met on Sunday, April 16, from 10:00 a.m., until 8:35 p.m.; the Committee to again meet Sunday, May 21, and report to the Board June 7, 1950.

MICHIGAN STATE MEDICAL SOCIETY

The 85th Annual Session and Postgraduate Conference



O. O. Beck, M.D.
Birmingham
Council Chairman

W. E. Barstow, M.D.
St. Louis
President

R. H. Baker, M.D.
Pontiac
Speaker

OFFICIAL CALL

The Michigan State Medical Society will convene in Annual Session in Detroit, Michigan, on September 18, 19, 20, 21, 22, 1950. The provisions of the Constitution and By-Laws and the Official Program will govern the deliberations.

W. E. Barstow, M.D.
President

O. O. Beck, M.D.
Council Chairman

R. H. Baker, M.D.
Speaker

J. E. Livesay, M.D.
Vice Speaker

Attest:

L. Fernald Foster, M.D.
Secretary

L. Fernald Foster, M.D.
Bay City
Secretary

J. E. Livesay, M.D.
Flint
Vice Speaker

TWO-DAY SESSION OF HOUSE OF DELEGATES, SEPTEMBER 18-19, 1950

The 1950 House of Delegates of the Michigan State Medical Society will hold a two-day session beginning Monday, September 18, at 10:00 a.m. The business of the House of Delegates will be transacted in the Book-Cadillac Hotel, Detroit.

The House will also meet Monday at 8:00 p.m. and on Tuesday, September 21, at 10:00 a.m. and at 8:00 p.m.

The intervals between meetings of the House of Delegates have been spaced to permit the Reference Committees ample time to transact all business referred to them.

Seating of Delegates

"Any Delegate-Elect not present to be seated at the hour of call of the first meeting may be replaced by the accredited Alternate next on the list as certified by the Secretary of the component County Society involved."—MSMS By-Laws, Chapter 8, Section 6.

Michigan State Medical Society

Past Presidents 1866-1949

1866—*C. M. Stockwell, Port Huron
1867—*J. H. Jerome, Saginaw
1868—*Wm. H. DeCamp, Grand Rapids
1869—*Richard Inglis, Detroit
1870—*I. H. Bartholomew, Lansing
1871—*H. O. Hitchcock, Kalamazoo
1872—*Alonzo B. Palmer, Ann Arbor
1873—*E. W. Jenk, Detroit
1874—*R. C. Kedzie, Lansing
1875—*Wm. Brodie, Detroit
1876—*Abram Sager, Ann Arbor
1877—*Foster Pratt, Kalamazoo
1878—*Ed. Cox, Battle Creek
1879—*George K. Johnson, Grand Rapids
1880—*J. R. Thomas, Bay City
1881—*J. H. Jerome, Saginaw
1882—*Geo. W. Topping, DeWitt
1883—*A. F. Whelan, Hillsdale
1884—*Donald Maclean, Detroit
1885—*E. P. Christian, Wyandotte
1886—*Charles Shepard, Grand Rapids
1887—*T. A. McGraw, Detroit
1888—*S. S. French, Battle Creek
1889—*G. E. Frothingham, Detroit
1890—*L. W. Bliss, Saginaw
1891—*George E. Ranney, Lansing
1892—*Charles J. Lundy (died before taking office)
*Gilbert V. Chamberlain, Flint, Acting President
1893—*Eugene Boise, Grand Rapids
1894—*Henry O. Walker, Detroit
1895—*Victor C. Vaughan, Ann Arbor
1896—*Hugh McColl, Lapeer
1897—*Joseph B. Griswold, Grand Rapids
1898—*Ernest L. Shurly, Detroit
1899—*A. W. Alvord, Battle Creek
1900—*P. D. Patterson, Charlotte
1901—*Leartus Connor, Detroit
1902—*A. E. Bulson, Jackson
1903—*Wm. F. Breakey, Ann Arbor
1904—*B. D. Harison, Sault Ste. Marie
1905—*David Inglis, Detroit
1906—*Charles B. Stockwell, Port Huron
1907—*Hermon Ostrander, Kalamazoo
1908—*A. F. Lawbaugh, Calumet
1909—*J. H. Carstens, Detroit
1910—*C. B. Burr, Flint
1911—*D. Emmett Welsh, Grand Rapids
1912—*Wm. H. Sawyer, Hillsdale
1913—*Guy L. Kiefer, Detroit
1914—*Reuben Peterson, Ann Arbor
1915—*A. W. Hornbogen, Marquette
1916—*Andrew P. Biddle, Detroit
1917—*Andrew P. Biddle, Detroit
1918— Arthur M. Hume, Owosso
1919—*Charles H. Baker, Bay City
1920—*Angus McLean, Detroit
1921—*Wm. J. Kay, Lapeer
1922—*W. T. Dodge, Big Rapids
1923—*Guy L. Connor, Detroit
1924—*C. C. Clancy, Port Huron
1925—*Cyrenus G. Darling, Ann Arbor
1926— J. B. Jackson, Kalamazoo
1927— Herbert E. Randall, Flint
1928— Louis J. Hirschman, Detroit
1929— J. D. Brook, Grandville
1930—*Ray C. Stone, Battle Creek
1931—*Carl F. Moll, Flint
1932— J. Milton Robb, Detroit
1933—*George LeFevre, Muskegon
1934—*R. R. Smith, Grand Rapids
1935— Grover C. Penberthy, Detroit
1936— Henry E. Perry, Newberry
1937— Henry Cook, Flint
1938— Henry A. Luce, Detroit
1939— Burton R. Corbus, Grand Rapids
1940— Paul R. Urmston, Bay City
1941— Henry R. Carstens, Detroit
1942— H. H. Cummings, Ann Arbor
1943— C. R. Keyport, Grayling
1944— A. S. Brunk, Detroit
1945—* V. M. Moore, Grand Rapids (died before taking office)
1945— R. S. Morrish, Flint
1946— Wm. A. Hyland, Grand Rapids
1947—*P. L. Ledwidge, Detroit
1948— E. F. Sladek, Traverse City
1949—Wilfrid Haughey, Battle Creek (President for a Day, Sept. 21, 1949)

*Deceased.

Michigan State Medical Society

The 85th Annual Session and Postgraduate Conference

Book-Cadillac Hotel, Detroit, Michigan

September 20-21-22, 1950

INFORMATION

● DETROIT WILL BE HOST TO MSMS IN SEPTEMBER.

● **The Program of the Assembly** for the 85th Annual Session and Postgraduate Conference of the Michigan State Medical Society lists guest speakers from all parts of the United States. They are the usual stars in the medical world which always grace the annual conventions of the Michigan State Medical Society; they insure a valuable concentrated postgraduate course in all phases of medicine and surgery for the busy practitioners of Michigan and neighboring states and the Province of Ontario, on September 20, 21, 22, 1950.

● **Registration,** Tuesday afternoon through Friday afternoon, September 19-22, Fifth Floor, Book-Cadillac Hotel. Advance registration—on Tuesday and early Wednesday morning—will save your time. Present your State Medical Society or Canadian Medical Association membership card to expedite registration.

No registration fee for AMA and CMA members.

Doctors of Medicine, who are not members of the American Medical Association or the Canadian Medical Association will be accorded the privileges of the MSMS Annual Session upon payment of a $5 registration fee.

Register as soon as you arrive. Admission by badge only.

● **All subjects** on the MSMS Annual Session are applicable to clinical medicine. They stress diagnosis and treatment, usable in everyday practice.

● **Postgraduate Credits** given to every MSMS member who attends MSMS Annual Session.

● **Six Assemblies and one Public Meeting**—Thirteen Section Meetings—Twenty-four Discussion Conferences on September 20-21-22.

● **Public Meeting.** The General Meeting of Wednesday, September 20, 8:30 p.m.—Officers' Night—will be open to the public. Invite your patients and friends to hear Dr. J. O. Christianson of St. Paul, Minn., present the Biddle Lecture, and E. L. Henderson, M.D., Louisville, Ky., President, American Medical Association, Ballroom, Book-Cadillac Hotel, Detroit.

● **Papers Will Begin and End on Time.** This scientific meeting will feature by-the-clock promptness and regularity.

● **Ninety-nine Technical Exhibits** will contain much of interest and value. Intermissions to view the exhibits have been arranged.

Please Register at Every Booth.

● **C. E. Umphrey, M.D., Detroit, is General Chairman** of the Detroit Committee on Arrangements for the 1950 MSMS Annual Session.

● **Press Relations Committee for the Scientific session:**

J. E. Livesay, M.D., Chairman
H. F. Dibble, M.D.
L. Fernald Foster, M.D.
E. F. Sladek, M.D.

● **Cabaret-Style Dance and Entertainment,** with the compliments of the Michigan State Medical Society, will be held in the Grand Ballroom, Book-Cadillac Hotel, Thursday evening, September 21. All who register and their ladies, will receive a card of admission and are cordially invited to attend.

● **MSMS House of Delegates** convenes Monday, September 18, at 10:00 a.m., Book-Cadillac Hotel. It will hold two meetings on Monday, at 10:00 a.m. and at 8:00 p.m., also two meetings on Tuesday, September 19, at 10:00 a.m. and at 8:00 p.m.

● **The Woman's Auxiliary** to the Michigan State Medical Society will present an attractive social and business program at the Statler Hotel, Detroit. The wife of every MSMS member is cordially invited to attend.

● **Members of Michigan Medical Service** will meet in annual session Tuesday, September 19, Grand Ballroom, Book-Cadillac Hotel, at 2:00 p.m., following the MMS luncheon at 1:00 p.m. in the English Room.

SAVE AN ORDER FOR THE EXHIBITOR AT THE MICHIGAN STATE MEDICAL SOCIETY ANNUAL SESSION

MICHIGAN STATE MEDICAL SOCIETY

The 85th Annual Session and Postgraduate Conference

Book-Cadillac Hotel, Detroit, September 18, 19, 20, 21, 22, 1950

HOUSE OF DELEGATES — ORDER OF BUSINESS*

MONDAY, SEPTEMBER 18

English Room, Book-Cadillac Hotel, Detroit

10:00 a.m.—First Meeting

1. Call to order by Speaker.
2. Report of Committee on Credentials.
3. Roll Call.
4. Appointment of Reference Committees
   (a) On Officers' Reports
   (b) On Reports of The Council
   (c) On Reports of Standing Committees
   (d) On Reports of Special Committees
   (e) On Constitution and By-Laws
   (f) On Resolutions
   (g) On Special Memberships
   (h) On Rules and Orders of Business
   (i) On Legislation and Public Relations
   (j) On Hygiene and Public Health
   (l) On Miscellaneous Business
   (m) On Executive Session
   (n) On Emergency Medical Service
5. Speaker's Address—R. H. Baker, M.D., Pontiac
6. President's Address—W. E. Barstow, M.D., St. Louis
7. President-Elect's Address—C. E. Umphrey, M.D., Detroit
8. Annual Report of The Council—O. O. Beck, M.D., Birmingham, Chairman
9. Report of Delegates to American Medical Association—W. D. Barrett, M.D., Detroit, Chairman
10. Report of Commission on Healing Arts—J. S. DeTar, M.D., Milan, Chairman
11. Report of Committee to Study Councilor Districts —B. R. Corbus, M.D., Grand Rapids, Chairman
12. Resolutions**
13. Report of M.S.M.S. Standing Committees
    A. Committee on Postgraduate Medical Education
    B. Preventive Medicine Committee:
       (1) Rheumatic Fever Control Committee
       (2) Cancer Control Committee
       (3) Maternal Health Committee
       (4) Venereal Disease Control Committee
       (5) Tuberculosis Control Committee
       (6) Industrial Health Committee
       (7) Mental Hygiene Committee
       (8) Child Welfare Committee
           (a) Sub-Committee on Hearing Defects
       (9) Iodized Salt Committee
       (10) Geriatrics Committee
           (a) Sub-Committee on Diabetes Control
           (b) Sub-Committee to Study Problem of Caring for Aged
       (11) Committee on Infectious Diarrhea
    C. Committee on Distribution of Medical Care
    D. Committee on Public Relations (and sub-committees)
    E. Committee on Ethics
    F. Legislative Committee
14. Reports of Special Committees
    A. Beaumont Memorial Committee
    B. Scientific Radio Committee
    C. Advisory Committee to Woman's Auxiliary
    D. Liaison Committee with State Medical Assistants Society
    E. Advisory Committee to National Foundation for Infantile Paralysis
    F. Committee on Increase of Medical Students Graduated from Michigan Medical Schools

Reports of the Committees of The Council, including Committee on Scientific Work, are included in the Annual Report of The Council

MONDAY, SEPTEMBER 18

Grand Ballroom, Book-Cadillac Hotel, Detroit

8:00 p.m.—Second Meeting

15. "Report on Socialism in England and Europe," by Prof. Carl M. Horn, Michigan State College, East Lansing, organizer of the "Flying Classroom" of 1950.
16. Supplementary Report of Committee on Credentials
17. Roll call
18. Unfinished Business
19. New Business*
20. Reports of Reference Committees
    (a) On Officers Reports
    (b) On Reports of The Council
    (c) On Reports of Standing Committees
    (d) On Reports of Special Committees
    (e) On Constitution and By-Laws
    (f) On Resolutions
    (g) On Special Memberships
    (h) On Rules and Orders of Business
    (i) On Legislation and Public Relations
    (j) On Hygiene and Public Health
    On Medical Service and Pre-payment Insurance
    (l) On Miscellaneous Business
    (m) On Executive Session
    (n) On Emergency Medical Service

*See the Constitution Articles IV, VII and XII, and the By-Laws, Chapter 8 on "House of Delegates."

**All Resolutions, special reports, and new business shall be presented in triplicate (By-Laws, Chapter 8, Section 10-m)

*All Resolutions, special reports, and new business shall be presented in triplicate (By-Laws, Chapter 8, Section 10-m)

TUESDAY, SEPTEMBER 19

Grand Ballroom, Book-Cadillac Hotel, Detroit

10:00 a.m.—Third Meeting

21. Supplementary Report of Committee on Credentials
22. Roll Call
23. Unfinished Business
24. New Business
25. Supplementary Reports of Reference Committees

TUESDAY, SEPTEMBER 19

Grand Ballroom, Book-Cadillac Hotel, Detroit

8:00 p.m.—Fourth Meeting

26. (Topic to be announced) by E. L. Henderson, M. D., Louisville, Ky., President of American Medical Association and of World Medical Association.
27. Supplementary Report of Committee on Credentials
28. Roll call
29. Address by E. L. Henderson, M.D., Louisville, President of the American Medical Association
30. Unfinished Business
31. Supplementary Report of The Council
32. Supplementary Reports of Reference Committees
33. Elections
    (a) Councilors
    2nd District—P. A. Riley, M.D., Jackson—Incumbent
    3rd District—Wilfrid Haughey, M.D., Battle Creek—Incumbent
    15th District—O. O. Beck, M.D., Birmingham—Incumbent
    16th District—E. A. Osius, M.D., Detroit—Incumbent
    (b) Delegates to American Medical Association
    W. D. Barrett, M.D., Detroit—Incumbent
    W. H. Huron, M.D., Iron Mountain—Incumbent
    R. L. Novy, M.D., Detroit—Incumbent
    (c) Alternate Delegates to American Medical Association
    R. A. Johnson, M.D., Detroit—Incumbent
    R. H. Denham, M.D., Grand Rapids—Incumbent
    C. I. Owen, M.D., Detroit—Incumbent
    (d) President-Elect
    (e) Speaker of House of Delegates
    (f) Vice Speaker of House of Delegates
34. Adjournment.

DELEGATES TO MSMS HOUSE OF DELEGATES, 1950

Names of Alternates appear in Italics

Officers

R. H. Baker, M.D.
1110 Peoples Bank Bldg., Pontiac, Speaker
J. E. Livesay, M.D.
619 Mott Foundation Bldg., Flint, Vice Speaker
L. Fernald Foster, M.D.
919 Washington, Bay City, Secretary
E. F. Sladek, M.D.
Traverse City, Immediate Past President

Allegan

L. F. Brown, M.D., 133 E. Allegan, Otsego
E. B. Johnson, M.D., Allegan

Alpena-Alcona-Preque Isle

E. S. Parmenter, M.D., 140 E. Washington Ave., Alpena
F. J. O'Donnell, M.D., Alpena

Barry

A. B. Gwinn, M.D., City Bank Bldg., Hastings
Stewart Lofdahl, M.D., 307 N. Main, Nashville

Bay-Arenac-Iosco

W. S. Stinson, M.D., 101 W. John, Bay City
O. J. Johnson, M.D., 207 N. Walnut, Bay City
N. R. Moore, M.D., 5th and Madison Aves., Bay City

Berrien

D. W. Thorup, M.D., 169 Michigan St., Benton Harbor
F. A. Rice, M.D., Niles

Branch

R. L. Wade, M.D., Coldwater
H. J. Meier, M.D., Coldwater

Calhoun

G. W. Slagle, M.D., 1206 Security National Bank, Battle Creek
H. C. Hansen, M.D., 417 Post Bldg., Battle Creek
G. A. Zindler, M.D., 1206 Security National Bank, Battle Creek
S. T. Lowe, M.D., 1009 Security National Bank, Battle Creek

Cass

S. L. Loupee, M.D., Dowagiac
K. C. Pierce, M.D., Dowagiac

Chippewa-Mackinac

B. T. Montgomery, M.D., Sault Ste. Marie
D. C. Howe, M.D., Sault Ste. Marie

Clinton

F. W. Smith, M.D., Ovid
W. B. McWilliams, M.D., Maple Rapids

Delta-Schoolcraft

W. A. LeMire, M.D., 1106 1st Ave. S., Escanaba
A. H. Miller, M.D., 904 Wisconsin Ave., Gladstone

Dickinson-Iron

D. R. Smith, M.D., 105 E. A St., Iron Mountain
L. E. Irvine, M.D., Iron River

Eaton

G. C. Stucky, M.D., Box 140, Charlotte
P. H. Engle, M.D., Olivet

Genesee

C. W. Colwell, M.D., 706 Citizens Bank Bldg., Flint
C. K. Stroup, M.D., 2002 E. Court, Flint

J. E. Livesay, M.D., 619 Mott Foundation Bldg., Flint
F. D. Johnson, M.D., 202 Paterson Bldg., Flint
L. M. Bogart, M.D., 1008 Genesee Bank Bldg., Flint
E. P. Vary, M.D., 608 National Bldg., Flint
F. W. Baske, M.D., 1217 Mott Foundation Bldg., Flint
F. A. Barbour, M.D., 1439 Mott Foundation Bldg., Flint

Gogebic
J. R. Franck, M.D., Wakefield
D. L. Davidson, M.D., Bessemer

Grand Traverse-Leelanau-Benzie
D. G. Pike, M.D., 876 E. Front, Traverse City
H. L. Weitz, M.D., 529 Monroe, Traverse City

Gratiot-Isabella-Clare
M. G. Becker, M.D., Edmore
J. L. Rottschafer, M.D., Alma

Hillsdale
L. W. Day, M.D., Jonesville
O. G. McFarland, M.D., North Adams

Houghton-Baraga-Keeweenaw
T. P. Wickcliffe, M.D., Calumet
A. B. Aldrich, M.D., Hancock

Huron
C. W. Oakes, M.D., Harbor Beach
C. A. Scheurer, M.D., Pigeon

Ingham
R. S. Breakey, M.D., 1211 Bank of Lansing Bldg., Lansing
L. G. Christian, M.D., 108 E. St. Joseph, Lansing
H. W. Wiley, M.D., 300 W. Ottawa, Lansing
J. M. Wellman, M.D., 301 Seymour Ave., Lansing
E. J. Robson, M.D., 215 N. Walnut
Milton Shaw, M.D., 320 Townsend Ave., Lansing

Ionia-Montcalm
W. L. Bird, M.D., Greenville
J. A. Van Loo, M.D., Belding

Jackson
J. D. Van Schoick, M.D., Hanover
J. W. Rice, M.D., 603 City Bank Bldg., Jackson
E. H. Corley, M.D., 1401 Reynolds Bldg., Jackson
C. S. Clarke, M.D., 605 Dwight Block, Jackson

Kalamazoo
R. J. Armstrong, M.D., 605 Hanselman Bldg., Kalamazoo
W. A. Scott, M.D., 208 Bronson Medical Center, Kalamazoo
R. W. Shook, M.D., 611 American National Bank Bldg., Kalamazoo
F. C. Ryan, M.D., 217 Pratt Bldg., Kalamazoo
Albert DeGroat, M.D., 458 W. South, Kalamazoo
W. B. Crane, M.D., 420 S. Rose, Kalamazoo

Kent
A. A. VanSolkema, M.D., 953 E. Fulton, Grand Rapids
L. C. Carpenter, M.D., Metz Building, Grand Rapids
G. W. DeBoer, M.D., 516 Medical Arts Bldg., Grand Rapids
W. B. Mitchell, M.D., 510 Medical Arts Bldg., Grand Rapids
J. W. Logie, M.D., Metz Building, Grand Rapids
A. V. Wenger, M.D., 302 Lorraine Bldg., Grand Rapids
W. R. Torgerson, M.D., Metz Building, Grand Rapids
Torrance Reed, M.D., Ashton Building, Grand Rapids
S. L. Moleski, M.D., 528 Medical Arts Bldg., Grand Rapids
L. O Grant, M.D., 420 Medical Arts Bldg., Grand Rapids
R. S. Van Bree, M.D., 204 Loraine Bldg., Grand Rapids
C. E. Farber, M.D., 408 Metz Building, Grand Rapids

Lapeer
D. J. O'Brien, M.D., Lapeer
Carl Zolliker, M.D., 240 Main, Imlay City

Lenawee
R. E. Dustin, M.D., Tecumseh
H. E. Isley, M.D., Blissfield

Livingston
H. C. Hill, M.D., Howell
R. W. Lieber, M.D., Howell

Luce
E. H. Campbell, M.D., Newberry
R. E. Gibson, M.D., Newberry

Macomb
D. B. Wiley, M.D., Utica
E. G. Siegfried, M.D., New Haven

Manistee
E. B. Miller, M.D., 425 River, Manistee
J. F. Konopa, M.D., Manistee

Marquette-Alger
N. J. McCann, M.D., Marquette
Moses Cooperstock, M.D., Marquette

Mason
E. B. Boldyreff, M.D., Custer
J. R. Carney, M.D., 202 N. Park, Ludington

Mecosta-Osceola-Lake
T. P. Treynor, M.D., Big Rpids
P. B. Kilmer, M.D., Reed City

Medical Society of North Central Counties
C. G. Clippert, M.D., Grayling
D. B. McDowell, M.D., West Branch

Menominee
J. R. Heidenreich, M.D., Daggett
J. N. Dewane, M.D., 117 Ogden Ave., Menominee

Midland
R. S. Ballmer, M.D., Box 111, Midland
C. L. MacCallum, M.D., 221 Reinhart Bldg., Midland

Monroe
T. A. McDonald, M.D., 7 E. Front, Monroe
J. P. Flanders, M.D., 31 Washington, Monroe

Muskegon
R. D. Risk, M.D., 1160 Ransom St., Muskegon
N. W. Scholle, M.D., Anderson Bldg., Muskegon Heights
L. L. LeFevre, M.D., 450 W. Western, Muskegon
D. R. Boyd, M.D., 1735 Peck, Muskegon

Newaygo
B. L. Masters, M.D., Fremont
T. R. Deur, M.D., Grant

Northern Michigan Medical Society
J. R. Rodger, M.D., Bellaire
H. V. Lilga, M.D., 113 Howard, Petoskey

Oakland
C. R. Gatley, M.D., 97 N. Perry, Pontiac
P. E. Sutton, M.D., 629 Washington Square Bldg., Pontiac
H. A. Furlong, M.D., 932 Riker Bldg., Pontiac
R. H. Baker, M.D., 1110 Pontiac State Bank Bldg., Pontiac
J. M. Markley, M.D., 849 W. Huron, Pontiac
J. D. Green, M.D., 311 Wabeek Bldg., Birmingham
O. R. MacKenzie, M.D., 404 Pontiac Trail, Walled Lake
E. B. Cudney, M.D., 216 Oneida, Pontiac

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1. Four Years of High School
2. Two Years of College (including Physics, Chemistry, and Biology)
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4. One Year's Internship in a Hospital
5. A Knowledge of the Human Body: Its Normal Structures, Functions and Governing Laws
6. A Knowledge of All Common Diseases in Order to Know What Disease is Present
7. A Knowledge of Effective Remedial Agents: Ability to Apply the One Most Needed.

These Minimum Essentials Should Be Possessed by All Who Treat the Sick

THE 85th ANNUAL SESSION

WOMAN'S AUXILIARY TO THE MICHIGAN STATE MEDICAL SOCIETY

Convention and 24th Annual Meeting

Hotel Statler, Detroit—September 19, 20, 21, 1950

TENTATIVE PROGRAM

Monday, September 18

1—5 p.m. Registration, Oak Foyer

Tuesday, September 19

9:30 a.m. Registration, Oak Foyer

10:30 a.m. Finance Committee, President's Suite

6.30 p.m. Subscription Dinner, English Room

6:30 p.m. President's and Secretaries' Dinner. Place to be announced.

Wednesday, September 20

9:30 a.m. Registration, Oak Foyer

10:30 a.m. Pre-Convention Board Meeting, Parlor B

12:30 p.m. Luncheon, Ivory Room

5:30 p.m. Get-Acquainted Hour, Michigan Room

6:30 p.m. Annual Dinner, Michigan Room

8:00 p.m. Biddle Oration and President's Night, Book-Cadillac

Thursday, September 21

8:00 a.m. Registration, Oak Foyer

9:00 a.m. Organizatiion Breakfast
Directors, Retiring and New; President-Elect, Parlor E

9:30 a.m. Annual Meeting, Michigan Room

1:00 p.m. Annual Luncheon, Michigan Room

3:30 p.m. Post-Convention Board Meeting

HOTEL RESERVATIONS

85th Annual Session
MICHIGAN STATE MEDICAL SOCIETY
Detroit, September 20, 21, 22, 1950

The reservation blank below is for your convenience in making your hotel reservations in Detroit. Please send your application to C. B. Loftus, Front Office Manager, Book-Cadillac Hotel, Detroit, Michigan. Mailing your application now will be of material assistance in securing hotel accommodations.

As very few singles are available, registrants are requested to co-operate with the Committee on Hotels by sharing a room with another registrant.

Commiteee on Hotels,
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Hotel of First Choice: .....
Second Choice: .....

Names and addresses of all applicants including person making reservation:

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.....	.....	.....	.....
.....	.....	.....	.....

Date ..... Signature .....

Address ..... City .....

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

To provide easily accessible sanitary laboratory services for twenty-one counties in the northern part of the lower peninsula and the eastern part of the upper peninsula, the Michigan Department of Health will operate a trailer laboratory in Gaylord from June 15 to September 15.

The laboratory services will be available to the district health departments and to the field personnel of the Water Resources Commission. The area serves an increased population during the summer and is distant from the Michigan Department of Health Laboratories at Lansing, Grand Rapids, Houghton or Powers.

The trailer laboratory is equipped to do bacteriological tests of drinking water, lakes, streams, milk and food utensils.

* * *

Topics and speakers for Michigan Department of Health Broadcasts over Radio Station WKAR, East Lansing, at 10:30 a.m., Tuesdays, follow:

June 20—Building or Buying a Dream: Sanitary Requirements—John Hepler, Division of Engineering.

June 27—Home Care of the Sick—Miss Helene Buker, Chief, Section of Public Health Nursing.

July 11—First Aid, At Home or Away—Dr. J. K. Altland, Director, Division of Local Health Administration.

July 18—What Makes Water Fit to Drink—Ray Faust, Chief, Water Supply Section.

July 25—Take Your Sneezes North: The Pollen Survey Findings of Ten Years—Dr. H. E. Cope, Clinical Pathologist, Division of Laboratories.

* * *

To assist in determining the policy of the Michigan Department of Health with regard to possible use of BCG vaccination in Michigan's Tuberculosis Control Program, a group of public health, medical epidemiological and tuberculosis authorities were invited to confer with Staate Health Commissioner Albert E. Heustis, May 15. The group prepared written recommendations for the Commissioner.

* * *

Approximately 100 health educators from eleven states registered for the Conference of Middle States Health Educators in the School of Public Health, University of Michigan, June 9 and 10. Participation in the Conference on the general problems of public health education was limited to educators from official state and local health departments and voluntary health agencies.

* * *

One out of every fifteen people who died in Michigan last year died by accident. Accidents were the fourth cause of death in the state. More fatalities occurred in home accidents than motor vehicle accidents. Falls were the largest cause of fatal home accidents.

* * *

The Film Loan Library of the Department now has a film on baby sitters which will be of interest to young mothers' groups as well as to teen-age groups. "The Baby Sitter" is a fifteen-minute sound film, produced by Young America Films, which shows a teen-age girl, properly trained for her job as a sitter, and follows her through an evening as she cares for two small children. The film points out the sitter's responsibilities and the responsibilities of the parents.

* * *

To assist local communities in the upper peninsula and the northern part of the lower peninsula in assuring themselves an adequate supply of blood plasma and fractions for the coming year, the Michigan Department of Health Blood Procurement Unit will be in the area during the next three months.

The unit's schedule from mid-June through September includes: June 13 to 16, Marquette; June 20, Baraga; June 23 and 24, Ontonagon; June 26 and 27, Houghton; June 29 and 30, Dickinson; July 13 and 14, Iron; July 17 and 18, Menominee; July 20 and 21, Delta; July 24 and 25, Ogemaw; July 26, Montmorency; July 27 and 28, Otsego; July 31 to August 3, Emmet; August 7 to 9, Manistee; August 10 and 11, Newago; August 14, Missaukee; August 15 to 17, Wexford; August 18, Lake; August 21, Benzie; August 22 and 23, Leelanau; August 24 to 26, Grand Traverse; August 31, and September 1, Calumet, Keweenau; September 7 to 9, Gogebic; September 11 to 13, Menominee; September 14, 15 and 18 to 20, Delta; and September 25 and 26, Schoolcraft.

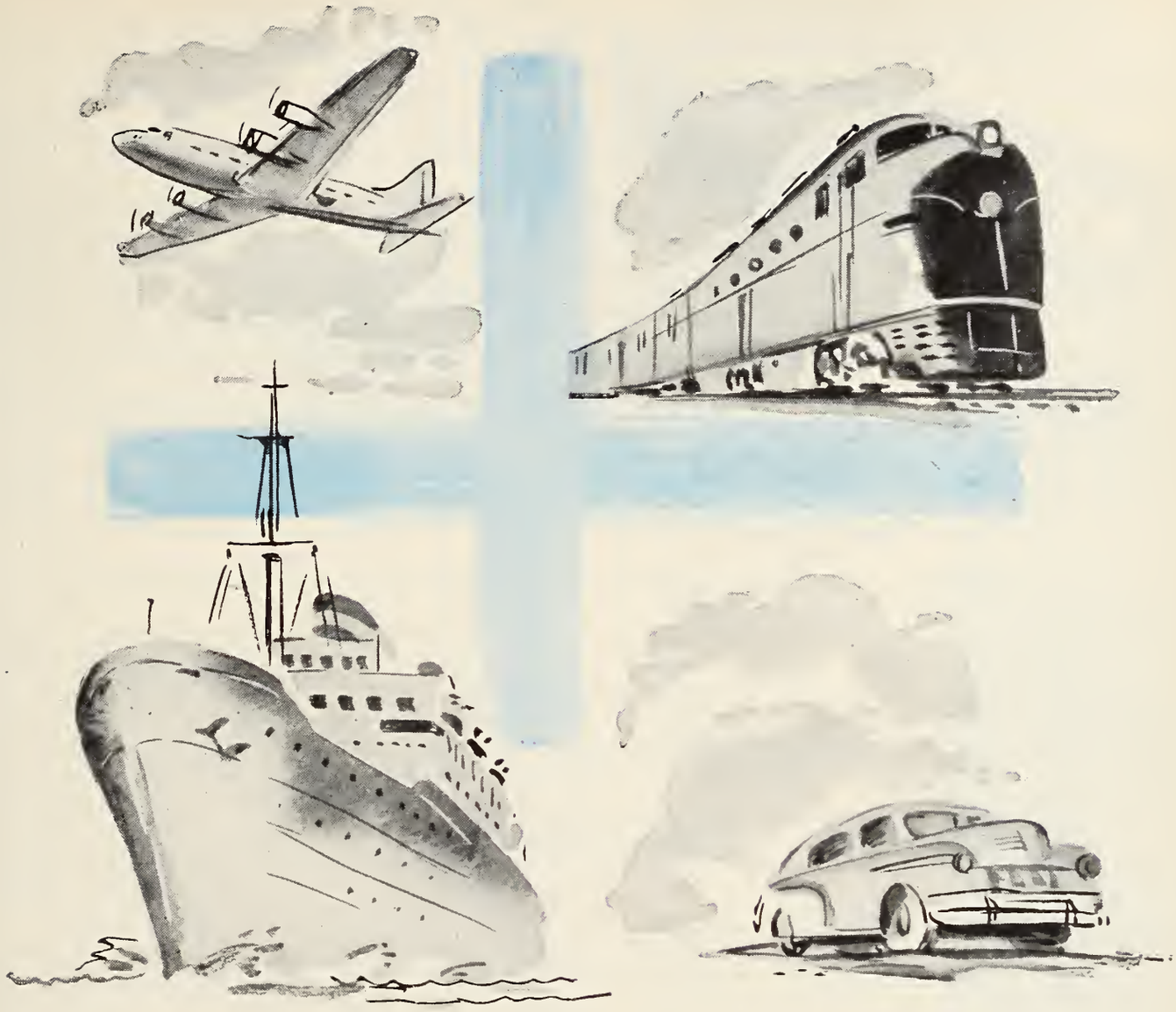
* * *

In Michigan, preparations for the White House Conference on Children and Youth are being co-ordinated by the Michigan Youth Commission. Mrs. Hickman Price, chairman of the Commission, has appointed Sam Rabinovitz, Room 1100, Cadillac Square Building, Detroit, as executive secretary of the Commission to expedite Michigan's planning for the conference.

* * *

To assist in filling vacancies in Michigan's local health department staffs, the Michigan Department of Health is now developing plans for additional training in public health work for local people who have proper educational qualifications and who wish employment in their communities or elsewhere in the state.

The Department is also planning in-service training to prepare men in public health sanitation fields for highly specialized projects which are to be carried out in their areas. Revision of the Michigan program for the training of public health engineering students became necessary with the discontinuance of training stipend funds from the W. K. Kellogg Foundation. While training opportunities are available for those public health engineering students who can pay their own expenses while training, no students could be recruited for subsidized training this year.



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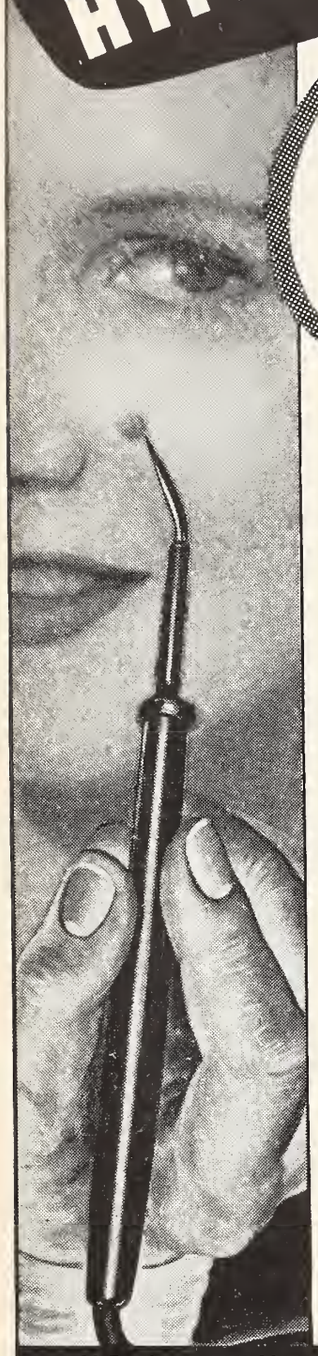

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YOU AND YOUR BUSINESS

FEDERAL INCOME TAX LAWS

(Continued from Page 630)

proprietorships or partnerships may not qualify for these benefits.

"The Board of Trustees of the American Medical Association authorized its representatives to record, at a meeting of the Association of the Bar of the City of New York, its support, in principle, of the proposal that the Internal Revenue Code be amended to permit physicians who practice as individual proprietors or partners to declare as business expenses the costs of pension programs for themselves, with the proviso that there should be a reasonable maximum pension.

"The American Medical Association believes that such an amendment would appreciably reduce the present discrimination."

VA FUNDS

Funds currently available for the treatment of eligible veterans in the Home Care Program have been reduced sharply. This is not due to action of the Veterans Administration, Michigan Medical Service which serves as your agent in the Home Care Program, or the members of the Michigan State Medical Society who provide the actual care for the eligible veteran. In order to continue giving treatment to the largest number of veterans possible, it is essential that all doctors screen their requests for authorization for treatment in a given case so that the number of treatments requested is reduced.

If the number of treatments ultimately authorized is insufficient to maintain maximum benefit to the veteran, please submit a written report of the veteran's present status to the Chief Medical Officer, Veterans Administration Regional Office, Detroit 32, Michigan, enumerating the specific reason for the need of additional treatment. Many of the present reports are deficient in clinical notes and description of the treatment rendered. Your report should present a clear and full evaluation of the case.

PREPAREDNESS

(Continued from Page 695)

plan, or has designated "teams" of physicians to handle various classes of casualties.

Medical societies should devote enough time to the education of their membership concerning the medical aspects of casualties resulting from use of the newer weapons as to be able to play a decisive part in Civil Defense. Medical men should stand ready to participate in all phases of disaster relief. We may never have to make use of our plans, but at least we shall not be "caught short."—H. F. B.

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Michigan Authors

Charles L. Schneider, Ph.D., M.D., Detroit, published a paper, "Complications of Late Pregrancy in Rabbits Induced by Experimental Placental Trauma," in the May, 1950, *Journal of Surgery, Gynecology, and Obstetrics.*

James A. Olson, M.D.; E. H. Steffensen, M.D.; R. R. Margulis, M.D.; Richmond W. Smith, M.D., and **E. L. Whitney, M.D.,** Detroit, published a paper, "ACTH in Ophthalmologic Conditions," in the April 22, 1950, *Journal of the American Medical Association.*

Reed M. Nesbit, M.D. and **Jack Lapides, M.D.,** of Ann Arbor, published a paper, "Observations on Urokon, A new Excretory Pyelographic Medium," in the February, 1950, *University of Michigan Medical Bulletin,* Ann Arbor.

Thomas M. Batchelor, M.D., and **Gordon M. Todd, M.D.,** Detroit, published a paper, "Aureomycin and Penicillin Therapy in Weil's Disease," in the May 6, 1950, *Journal of the American Medical Association.*

Max K. Newman, M.D., and **Elsie Wunderlich, M.D.,** Detroit, published a paper, "An Improved Shoulder Wheel," in *The Physical Therapy Review,* October, 1949.

Max K. Newman, M.D., and **Kenneth B. Babcock, M.D.,** Detroit, published a paper, "Physical Medicine Bridges the Gap," in *The Monder Hospital,* January, 1950.

Delmar F. Weaver, M.D., Detroit, published a paper, "Diagnosis and Treatment of Tumors of the Neck," in the *Annals of Otology, Rhinology and Laryngology* for March, 1950.

Wm. G. McEvitt, M.D., Detroit, "Treament of Acne Pits," in JAMA, March 4, 1950.

James A. Olson, M.D., E. H. Steffensen, M.D., R. R. Margulis, M.D., Richmond W. Smith, M.D., and E. L. Whitney, M.D., Detroit, on "ACTH in Ophthalmologic Conditions," in JAMA, April 22, 1950.

* * *

Politics.—In the November election the second district in Wisconsin (Madison) represented by Glen R. Davis (R.) will have a democratic opponent pledged to the full Administration Socialistic Program, including socialized medicine. Representative Davis' wife is a dentist, daughter of a dentist, sister of three dentists, sister-in-law of a dentist and physician.

In speeches to labor groups May 3 and 4, National Security Administration for Ewing called the American Medical Association a "mercenary mouthpiece" despite whose opposition national health insurance "will win on its own merits."

The national democratic committees have published a campaign booklet "Better Medical Care That You Can Afford."

VA Hospital Beds.—Secretary of Defense Johnson announced May 4 that the five Army and Navy General Hospitals will be de-activated by the end of June as scheduled. Two of the facilities—the Naval Hospital at Long Beach, Cal., and Army's Oliver at Augusta, Ga., will be transferred to the Veterans Administration. The states of Pennsylvania, Massachusetts and Michigan are considering purchasing Valley Forge, Murphy and Percy Jones Hospitals. The VA will staff 500 of Oliver's Hospital beds, 275 for general medical and surgical, and 225 for tuberculosis. Plans for building a new 500 bed VA Hospital in Atlanta are canceled. The Birmingham General Hospital at Van Nuys, Cal., will be closed.

* * *

Fifth Antihistamine Charged in Misleading Complaint by FTC.—Grove Laboratories, Inc., of St. Louis, is the fifth seller of antihistamines to be accused of false and misleading advertising by Federal Trade Commission. Formal complaint, to be made public today by FTC, lodges charges against Grove's product "Antamine," similar to those placed against "Resistab," "Anahist," "Inhiston" and "Kriptin." (WRMS Nos. 146 and 151.) Sole active ingredient of the mg. "Antamine" tablets is pyranisamine maleate, according to FTC complaint. Note: Commission members will hear oral arguments Wednesday on Hick's Liquid Capudine and a brace of "Dr. Miles" products, including Liquid Nervine, Nervine Tablets and Anti-Pain Pills. On Thursday, in Philadelphia, a hearing will be held before a FTC trial examiner on the government's case against the medicinal "Cystex," marketed by Knox Company, of Los Angeles. As reported by WRMS last week, three days of hearings on "Anahist" and "Resistab" will be conducted in Cleveland next Monday, Tuesday and Wednesday." WRMS, May 8, 1950.

* * *

Campaign Fodder.—One thousand extra copies of last year's health insurance hearings are being printed for use of Senate Labor and Public Welfare Committee. . . . Democratic National Committee is making available a 15-minute radio platter by FSA Administrator Oscar Ewing, giving his explanation of national health problems. Timed for campaign use by local stations, it allows for a "live" opening and close. . . . The Committee also has under preparation a 32-page booklet on President Truman's health program. It is particularly tailored for use in next fall's elections. . . . Interest is picking up in a FSA report on voluntary health insurance, issued two months ago. One thousand reprints have been ordered. . . . Various labor publications are admitting there is no hope for compulsory health insurance this session, but are urging members to work for candidates pledged to support President Truman's plan.

"In general, symptomatic improvement [of menopausal symptoms] was striking within 7 to 14 days after treatment..." with "Premarin."

Gray, L.: J. Clin. Endocrinol. 3:92 (Feb.) 1943.

Many clinicians have found that "Premarin" therapy usually brings about prompt relief of distressing menopausal symptoms. Furthermore, symptomatic improvement is followed by a gratifying sense of well-being in a majority of cases. This is the "plus" in "Premarin" therapy which tends to quickly restore the patient's normal mental outlook.

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Each cc. contains thiamine hydrochloride 25 mg., niacinamide 50 mg., calcium pantothenate 10 mg., pyridoxine hydrochloride 5 mg., riboflavin equivalent (by microbiologic assay) 10 mg

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(Continued from Page 730)

Hanford Plant Physicians Switch to Private Practice.—Effective May 1, physicians and dentists at the Hanford, Wash., plant of Atomic Energy Commission switch over from contract medicine to private practice of medicine. About 20,000 workers and their dependents are involved. AEC officials in Washington, discussing the change, said it resulted from an agreement between the plant's medical service department and the physicians and dentists. Before the decision was made, a group of hospital consultants and a second group of nationally known specialists studied the situation and recommended that the salary-plus-bonus plan be dropped in favor of private practice.

* * *

The Medical and Scientific Library of the American Cancer Society has available for use a Package Lending Library of reprints on cancer covering the majority of articles published in the past ten years. This service is now available to doctors and research workers requesting it. Reprints are sent post paid by the national office to the individual requesting them who pays the return postage. They ask that they be returned within a period of two weeks. They urge that requests be as specific as possible, and that general requests be avoided. For example, the volume of materials on cancer of the thyroid is obviously very great and to mail material of this bulk is impractical. However, if cancer of the thyroid-radioactive iodine as treatment is specified—the objectives of the Reprint Library would be served.

Requests should be addressed to Miss Mildred D. Donohue, Medical Librarian, Medical and Scientific Library, American Cancer Society, Inc., 47 Beaver Street, New York 4, New York.

* * *

Claims Ewing's Trip a "Political Stunt."—Federal Security Administrator Ewing's recent trip to England and his praise of the Health Service there was termed "a political stunt" by a practicing English physician in a letter to a New York City doctor friend, George Gray Ward.

"Mr. Ewing should have made contact with the profession itself, and he would have found almost throughout it an attitude of frustration and despair," the English doctor wrote.

He described general practice under the Health Act, pointing out the deterioration which is taking place in the medical care of the country.

"This deterioration in the character of its doctors," he wrote, "is the price the public will have to pay for getting medical service very much cheaper than heretofore. In this world nothing can be got for nothing, and cheap service is almost invariably poor service.

"Behind the Act is the wide Socialist determination to level all men down (politicians excluded) to a monotonous sameness whose standards are fixed by the standard of the laziest and most incompetent. For Heaven's sake, you in the U.S.A. keep out of it, if you want to keep clear of eventual totalizationism."

(Continued on Page 734)

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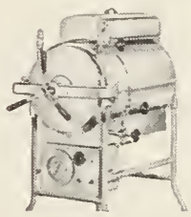

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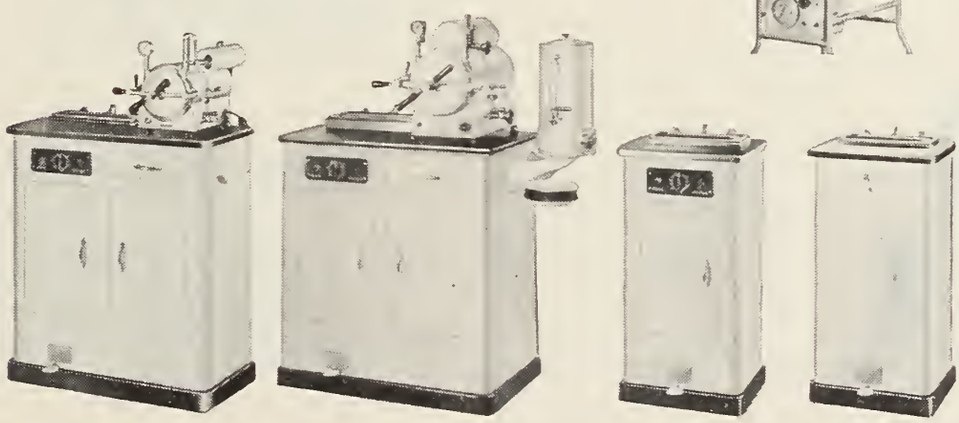

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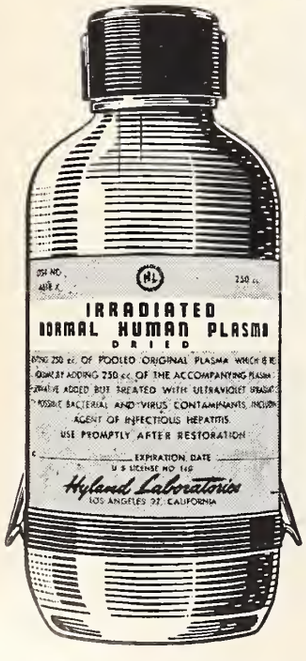

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(Continued from Page 732)

Gallup Poll Shows People Against Socialized Medicine.—The April 11 issue of *Look* magazine carries an article by Dr. George Gallup, public opinion polling specialist, in which he says that among the "informed group" the weight of sentiment against compulsory health insurance is about 3 to 2. The main reasons for opposition are (1) the cost and (2) the compulsory nature of the program which would require deductions from wages or salaries, and (3) fear that doctors would not be able to give individual treatment of high quality.

* * *

The Michigan Pathological Society on February 11, 1950, held its Detroit meeting in conjunction with the Detroit Urological Society, a branch of the American Urological Society, at Henry Ford Hospital. The afternoon and evenings were devoted to "Disease of the Urinary Tract." R. E. Olsen, M.D., of Pontiac, presided.

At the annual meeting in Ann Arbor in December, A. James French, M.D., of Ann Arbor, was named President-elect, and W. H. Stryker, M.D., of Wyandotte, was re-elected Secretary-Treasurer.

* * *

The American Board of Otolaryngology in May celebrated its twenty-fifth anniversary and held its twenty-fifth examination for certification. Two Michigan doctors have served on this board, Burt R. Shurly, M.D., of Detroit and James H. Maxwell, M.D. of Ann Arbor.

* * *

American Proctological Society.—The forty-ninth annual meeting of the American Proctological Society will occur in Los Angeles, California, July 2 to 5, 1950, at the Biltmore Hotel. Registration and Cocktail Party will be held on Sunday. Thereafter the programs start at 8:30 a.m. and run until 5:00 p.m. The last day, Wednesday, there will be a banquet at 7:00 p.m. A program has also been planned for the ladies each day.

* * *

James H. Maxwell, M.D., Professor of Otolaryngology, University of Michigan, Ann Arbor, will be again on the Faculty of the Research Study Club of Los Angeles in the twentieth annual Mid-winter Postgraduate Clinical Convention in Ophthalmology and Otolaryngology, January 15 through January 26, 1951.

* * *

Max K. Newman, M.D., Detroit, has been appointed to the Editorial Board of *International Review of Physical Medicine and Rehabilitation.*

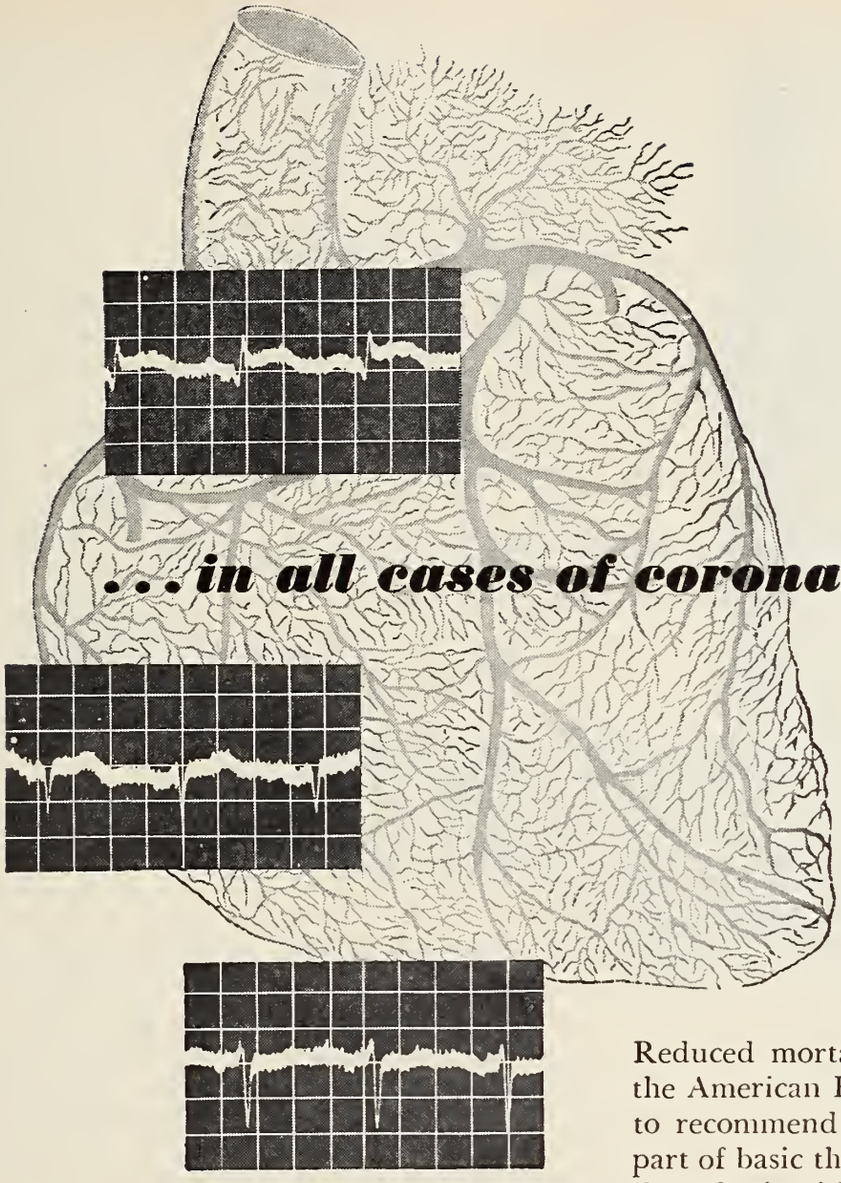
Doctor Newman has filled the following speaking engagements:

April 26, 1950—"Medical Control of Hemiplegia," Symposium of Physical Medicine and Rehabilitation, Bay City, Michigan.

May 1, 1950—"A Program for the Chronic Patient in the Hospital Program—Physical Medicine and Rehabilitation;" Trisate Meeting, Chicago, Illinois.

May 2, 1950—"The Relation of Physical Medicine to

(Continued on Page 736)



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Methods of extraction, purification and assay have been so perfected by recent investigations of Upjohn research workers that Depo-Heparin is now available in full clinical supply.

1. Wright, et al: Am. Heart J. 36, 801 (Dec.) 1948.

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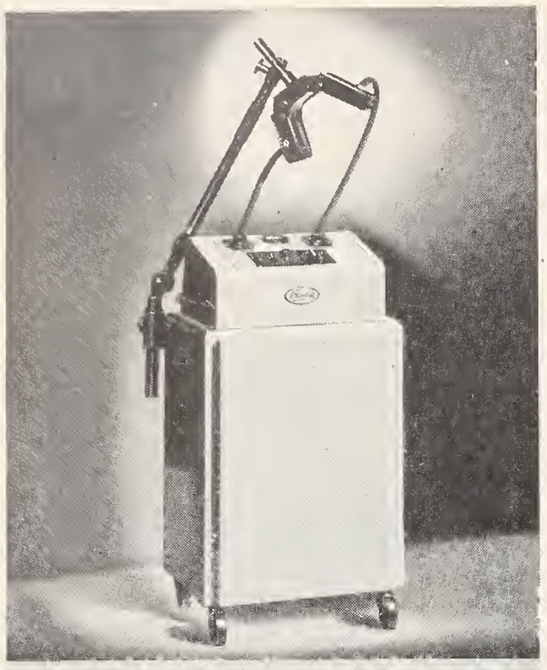

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(Continued from Page 734)

Psychiatry." Meeting of the American Psychiatric Association, Detroit, Michigan.

May 10, 1950—"The Medical Management of Peripheral Neuromuscular Dysfunction Due to Cerebral Vascular Accidents." Mid-western Section of the American Congress of Physical Medicine, Iowa City, Iowa.

* * *

Commenting on the Florida primary election defeat of Senator Claude E. Pepper by Representative George Smathers, Ernest E. Irons, M.D., President of the American Medical Association, issued the following statement on May 3:

"The result of the Democratic primary election in Florida, which provided a clear-cut test of voter sentiment, is reassuring evidence that the American people are veering away from the blandishments and empty promises of the socializers. Senator Pepper has been an arch-advocate of State Socialism, and his rejection by the Florida voters should serve as a warning to the Federal Administration that the American people will not permit any further abridgment of their fundamental freedoms.

"It is highly significant that National Compulsory Health Insurance was one of the two major issues raised in the Florida campaign. Senator Pepper openly endorsed the plan for political medicine. Representative Smathers, on the other hand, vigorously opposed Compulsory Health Insurance and the entire socialistic program."

* * *

The Michigan State Board of Registration in Medicine will hold an examination Monday, Tuesday and Wednesday, June 12, 13 and 14, 1950, concurrently in the Lecture Room, Second Floor, University Hospital, Ann Arbor, Michigan, and the Auditorium of the College of Medicine, Wayne University, Detroit, Michigan.

The Administrative and Executive Session of the Michigan State Board of Registration in Medicine will be held in Parlor A, Hotel Olds, Lansing, Michigan, on Thursday, June 15, 1950.

* * *

Cortisone.—Reduction in the price of cortisone is announced effective May 1, for the supplies available for clinical investigation from $40.50 to $33 per vial containing 300 milligrams. This reduces the price of cortisone from $135 to $110 per gram.

Increased production of cortisone during the remainder of this year will make it available for wide-range investigation of rheumatoid arthritis, rheumatic fever, and other diseases.

This is the third reduction in price since August, 1949, when cortisone was first offered at $60 per 300-milligram vial, equivalent to $200 per gram.

* * *

Polls Show Strong Opposition to Socialized Medicine.—Overwhelming public opposition to compulsory health insurance is registered in three polls conducted by Representatives. Results of the two polls completed have been

(Continued on Page 738)

GE *Service in a "pinch"*

It could happen to you; that "now-what-have-I-done" feeling that raced through the GE salesman's mind as the Lynchburg, Virginia, officer curbed him with screaming siren.

But read the story behind it. An emergency service call came in from Lynchburg to the Richmond office. The GE salesman in that area was enroute to take care of a previous call which took him through Lynchburg. GE immediately phoned the Chief of Police in Lynchburg and enlisted his cooperation in stopping the salesman as he entered town. Needless to add, emergency service was soon effected and a Lynchburg hospital's X-ray equipment was back in service in minutes!

This story is typical of the hundreds of documented GE service reports in our files. A service which proudly lends a new, broader conception to the guarantee that stands back of every GE installation.

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(Continued from Page 736)

published in the Congressional Record while about one-fourth of the last survey has been tabulated.

Rep. J. Harry McGregor of Ohio, sampling his district on this and other subjects, found that only 10 per cent of the people wanted socialized medicine. Mr. McGregor asked 12 questions, including: "Do you favor any type of federal legislation placing the medical and dental profession and operation of our hospitals under Federal control?" Two thousand replies were received. Mr. McGregor does not give the numerical totals but lists the replies as ten per cent yes, 90 per cent no. A breakdown by professions shows opposition from 99 per cent of the businessmen, salesmen, professional and retired people. Next in line in opposition were housewives, 98 per cent opposed; farmers 97 per cent and attorneys and barbers 96 per cent. Socialized medicine had its strongest support among school teachers, 12 per cent of whom answered yes.

A similar survey by Rep. Thomas E. Martin of Iowa showed only about 14 per cent in favor. Mr. Martin sent out approximately 25,000 questionnaires and received 4,221 replies, regarded as an ample proportion for a reliable sample. Among 18 questions he listed this: "Do you favor socialized medicine?" Responses totaled 575 yes and 3,409 no. Significantly both of these districts are almost evenly divided between rural and urban residents.

Of the 95,000 questionnaires Rep. Henry J. Latham of New York sent, 20,000 have been returned thus far but only 5,000 tabulated. In his Queens district only 13 per cent of those tabulated answered yes to the question: "Do you favor socialized medicine?"—753 answered yes, 4,424 no. A second question read: "Do you favor a national health program which would not socialize health services but would supply Federal grants and aids to the States and communities for health purposes?" On this 3,009 said yes and 2,136 answered no.

* * *

Medical Department Takes Over Care of Military Force Civilian Employes.—A new directive by Defense Secretary Johnson puts the three Surgeons General in direct charge of supplying medical service to the armed forces' 400,000 civilian employes in the United States. A small saving will be effected, but economy is not the reason for the shift, according to the Office of Medical Services, which will have overall administrative, technical and professional control of the program. The main objectives are to set up a uniform system of medical care for civilian employes of the three services, and to bring the program directly under control of the medical departments. The change is effective on July 1. Currently a dozen or more departments and agencies are involved in furnishing medical care to these civilian employes.

* * *

The Ingham County Medical Society held its 16th Annual Clinic in Lansing on May 4, 1950. Two-hundred and twenty-five doctors of medicine of Ingham and neighboring Counties attended the afternoon Clinic at

(Continued on Page 740)

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(Continued from Page 738)

which Richard B. Cattell, M.D., and Everett D. Keifer, M.D., of Boston, Massachusetts, presented a Symposium on "Diseases of the Upper Gastro-Intestinal Tract."

After a social hour and dinner, Mr. Jeoffrey Myers, a surgeon Penzance, England, discussed "Socialization of the Medical Profession," and Dr. Cattell read a paper on "The Management of Surgical Diseases of the Pancreas."

* * *

The Committees of the MSMS House of Delegates and of The Council are printed in this number of JMSMS, on Pages 622 and 624. The list comprises twenty seven committees; these are in addition to the twenty-three committees of the Michigan State Medical Society.

* * *

The American Congress of Physical Medicine will hold its 28th Annual Scientific and Clinical Session at the Hotel Statler, Boston, Massachusetts, August 28-31 and September 1, 1950. For information and program, write the Congress at 30 N. Michigan Ave., Chicago 2, Illinois.

* * *

"Future Nurses Club in Michigan's High Schools" is the title of a new folder issued by the Michigan Nursing Center Association which aids members of such groups—now in their thirteenth year—to explore nursing as a possible future vocation. Copies are available by writing the Center at 750 E. Main St., Lansing 12, Michigan.

Bay County Medical Society held its Second Annual Symposium on Clinical Medicine and Rehabilitation in Bay City on April 26 with an attendance of eighty-two. Speakers were Frederick G. House, M. D., Ann Arbor, Morton Hoberman, M.D., New York, W. D. Paul, M.D., Iowa City, E. S. Gurdjian, M.D., Detroit, and M. K. Newman, M.D., Detroit. At the dinner M. A. Knapp, M.D., of Minneapolis, Minnesota, and Allen H. Russek, M.D., of New York were the featured speakers.

* * *

Elmer L. Henderson, M.D., of Louisville, Kentucky, who in September will be President of the American Medical Association, will address the MSMS House of Delegates on Tuesday, September 19, and also will speak at the MSMS Officers Night Ceremonies of Wednesday, September 20, 8:00 p.m. Members of the Michigan State Medical Society, their wives and friends, are cordially invited to this Wednesday evening public meeting.

* * *

The American Academy of General Practice of Wayne County elected the following officers at its annual meeting, March 9: President, John A. Maloney, M.D.; Vice President, Perry C. Gittens; Secretary, M. H. Marks, M.D.; Treasurer, Harold F. Raynor, M.D.

William P. Curtiss, M.D., was elected to the Executive Committee to fill the unexpired term of M. H. Miller, M.D. Ralph Rueger, M.D., was appointed a member of the Executive Committee for one year of the unexpired term of John A. Maloney, M.D.

(Continued on Page 742)

Doctor . . .

Here are two great Spot Tests that simplify urinalysis

GALATEST

The simplest, fastest urine sugar test known.

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Galatest and Acetone Test (Denco) . . . Spot Tests that require no special laboratory equipment, liquid reagents, or external sources of heat. One or two drops of the specimen to be tested are dropped upon a little of the powder and a color reaction occurs immediately if acetone or reducing sugar is present. False positive reactions do not occur. Because of the simple technique required, error resulting from faulty procedure is eliminated. Both tests are ideally suited for office use, laboratory, bedside, and "mass-testing." Millions of individual tests for urine sugar were carried out in Armed Forces induction and separation centers, and in Diabetes Detection Drives.

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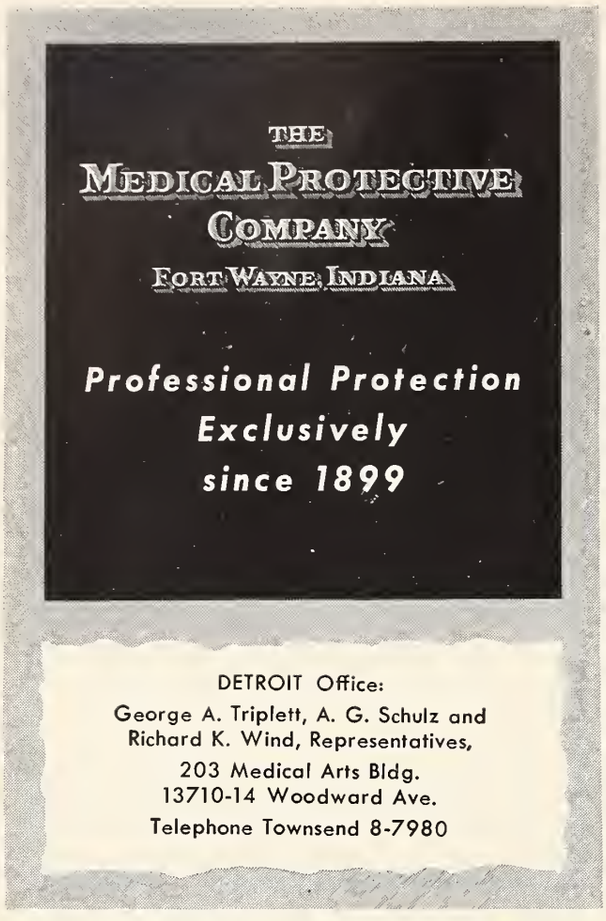

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Surgical Technic, Surgical Anatomy and Clinical Surgery, four weeks, starting July 10, August 7, September 11.
Personal Course in General Surgery, two weeks, starting September 25.
Surgery of Colon and Rectum, one week, starting September 11.
Esophageal Surgery, one week, starting October 16.
Breast and Thyroid Surgery, one week, starting June 26, October 2.
Thoracic Surgery, one week, starting June 12, October 9.
Gallbladder Surgery, ten hours, starting June 19, October 23.
Fractures and Traumatic Surgery, two weeks starting June 12, October 9.
Basic Principles in General Surgery, two weeks starting September 11.
GYNECOLOGY—Intensive Course, two weeks, starting June 19, September 25.
Vaginal Approach to Pelvic Surgery, one week, starting September 18.
OBSTETRICS—Intensive Course, two weeks, starting September 11.
MEDICINE—Intensive General Course, two weeks, starting October 2.
Electrocardiography and Heart Disease, two weeks, starting July 17.
Gastroscopy. two weeks, starting July 17, September 25.
DERMATOLOGY—Formal Course, two weeks, starting October 16. Informal Clinical Course every two weeks.
UROLOGY—Intensive Course, two weeks, starting September 25.
Cystoscopy, Ten Day Practical Course, every two weeks.

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(Continued from Page 740)

Russell G. Cushing, M.D., and John H. Schlemer, M.D., were elected to the Executive Committee for a period of three years.

* * *

Cerebral Palsy: A two weeks' intensive course in cerebral palsy will be given by M. A. Perlstein, M.D., Chicago, at the Cook County Graduate School of Medicine from July 31 to August 12, 1950. For information and application, write Mr. James F. Askin, Registrar, Medical School, 185 N. Wabash Ave., Chicago, Illinois.

* * *

The auditor's report (Ernst & Ernst) covering the MSMS books for 1949, together with the budgets of the State Medical Society for the year 1950, were published in JMSMS, March number, beginning on Page 358.

* * *

Postgraduate Training in Industrial Health.—General Motors recently announced that in cooperation with the University of Michigan, Ann Arbor, it is inaugurating a postgraduate training program in industrial health techniques for young physicians who have completed their internships. Under the program, the physicians will be in the employ of General Motors for 12 months. Eight months of this period will be served in the medical departments of General Motors and four months will be spent at the University of Michigan School of Public Health. This program, which compares with the resident hospital training many young physicians now undergo in other fields of medicine and surgery, was conceived by Max R. Burnell, M.D., Detroit, medical director of General Motors; Drs. Henry F. Vaughan, dean of the School of Public Health, and C. D. Selby, Detroit, resident lecturer in industrial health at the university. Any young man who has completed his internship in an approved hospital and is interested in industrial health work may apply for this training program through the General Motors Medical Director, General Motors Building, Detroit. Young physicians now serving their internship may begin this program after July 1.—*JAMA Medical News,* April 29, 1950.

* * *

The Michigan Proctologic Society will hold a dinner meeting on Thursday, September 21, Book-Cadillac Hotel, Detroit—during the MSMS Annual Session.

For reservation and program, write E. F. Sladek, M.D., President, 123 E. Front St., Traverse City, Michigan.

* * *

Uhlman Optical Company in Michigan will be known henceforth as "Ion Optical Company." The controlling stock of the Uhlman Optical Company in Michigan was purchased by M. E. Ion last February. The address of the Ion Optical Company will be the same as Uhlman's, in the past, 28 W. Adams Ave., Detroit 31, Michigan.

* * *

"G. P.," the Journal of the American Academy of General Practice, has as its Medical Editor, Walter C. Alvarez, M.D., Senior Consultant, Division of Medicine, Mayo Clinic, Rochester, Minnesota.

* * *

(Continued on Page 744)

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VOTING REGISTRATIONS SURPRISING

The Public Policy Committee and the Auxiliary are considering a spot check of voting registrations in Oklahoma. Such a check in Summit County, Ohio (Akron) revealed some startling facts. How would your county compare with these Summit County findings? How about taking the initiative in checking your locality?

18% of the physicians in the county did not vote in the 1948 election—13% of them were not even registered and therefore not eligible to vote.

22% of the wives of physicians did not vote—16% of them were not registered.

10% of the members of the Rotary Club did not vote—3% not registered. The tally for Kiwanis Club members was about the same.

18% of the druggists did not vote—15% not registered.

11% of the teachers did not vote—6% not registered.

32% of the bank employes, including executives, did not vote—26% were not even registered.

33% of the ministers did not vote—29% not registered.

34% of the retail grocers did not vote—29% were not registered.

And look at this: 21% of the members of the Chamber of Commerce did not vote—15% of them were not even registered.

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(Continued from Page 742)

"**House Committee investigating lobbying** is questioning the use of public funds by Social Security Director Oscar Ewing for his junket to Europe, charging he used it for furthering the case for compulsory health insurance." OSMA Gram (Ohio State Medical Association), April 17, 1950.

* * *

The new Maternity Hospital at the University of Michigan was placed in use on February 14, 1950. This $1,725,000 building accommodates 77 patients and 82 babies and is an addition to the University Hospital.

* * *

W. B. Harm, M.D., Detroit, has been appointed as Chairman of the MSMS representatives to the Liaison Committee with the Michigan State Board of Registration in Medicine, which Committee is studying proposed amendments to the Medical Practice Act of 1899.

* * *

Arch Walls, M.D., Detroit, was elected Chairman of the Board of Directors of the American Academy of General Practice at the 1950 meeting in St. Louis. Congratulations, Dr. Walls!

Fourteen per cent of tuberculosis deaths in Michigan occur at home, according to a study by the Federal Security Agency. Michigan ranks third in the United States—surpassed by only the District of Columbia and Minnesota and equalled by New York and Washington. Even at this rate, however, each year two hundred Michigan families are exposed to the hazards of terminal tuberculosis in their homes. Continued stress by the medical profession on hospital care for the tuberculous and earlier diagnosis are urged for protection to these families.

Michigan Tuberculosis Association

The Muskegon County Medical Society Bulletin of May, 1950, was dedicated to the late Archie McCrea, Editor of the *Muskegon Chronicle* for many years. The esteem in which Editor McCrea was held by all who knew him—including the medical profession—is best indicated by the action of the Muskegon County Medical Society Editorial Board.

* * *

"**Elementary Refraction**" by F. D. B. Waltz, M.D., is available, free of charge to MSMS members. For a copy, write Larkins Optical Company, 1008 Kales Building, Detroit 26, Michigan.

* * *

"**Doctors are Citizens.**"—All members of the Michigan State Medical Society recently received copies of a small leaflet "Doctors are Citizens" printed by the AMA National Education Campaign. This valuable informa-

(Continued on Page 746)

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(Continued from Page 744)

tion should be read by every doctor of medicine and the leaflet should be kept on file for reference and for work between now and November 7.

* * *

MSMS Committee Appointments.— President Elect C. E. Umphrey, M.D., Detroit, wishes to appoint to the MSMS Committees for 1950-51 those members who are interested in working for the Society and for Medicine during the ensuing year. Dr. Umphrey invites every such member to send his name and address to him (13331 Livernois Ave., Detroit 4, Michigan) and to indicate the Committee on which he would like to serve, giving a second choice. The list of MSMS Committees will be found among the first 10 pages of the May Journal, MSMS.

* * *

Important Meetings

1. MSMS Annual Session, Book-Cadillac Hotel, Detroit, week of September 18, 1950.
2. Michigan Postgraduate Clinical Institute, Book-Cadillac Hotel, Detroit, March 14-15-16, 1951. Get your hotel reservations early—especially for the September meeting.

* * *

Let 'Em Eat Cake

In need of medical care, British cabinet officers Sir Stafford Cripps and Ernest Bevin last summer left England, sought treatment and hospitalization in Switzerland.—"Future" magazine for Calif. Medical Students, Interns & Residents, published by Calif. Med. Asso.

* * *

L. Fernald Foster, M.D., Bay City, Secretary of the Michigan State Medical Society, spoke at the Women's Town Meeting in Detroit, March 27, on "Socialized Medicine"; to the Annual Banquet of the Alpha Kappa Kappa Fraternity in Columbus, Ohio, March 30, on "Medical Public Relations"; and to the Wexford County Medical Society's Public Meeting in Cadillac, April 14, on "Compulsory Health Insurance." Dr. Foster also presented talks at the followine Press Conferences: Battle Creek, February 24; Traverse City, March 3; Detroit, March 7; Flint, March 15; Grand Rapids, March 17; and Kalamazoo, March 24.

* * *

J. S. DeTar, M.D., Milan, MSMS Councilor, gave talks to the following organizations: Milan Rotary Club, January 17; Michigan Association of Supervisors, January 25; Milan Kiwanis Club, January 26; Michigan Capital Club, Lansing, February 6; Ypsilanti Lions' Club, February 7; Ann Arbor Business and Professional Women's Club, February 14; Detroit Colony Club, February 15; Bay County Auxiliary Medical Society, February 28; Livingston County Medical Society, March 4; South Lyons Kiwanis Club, April 3; Monroe County Medical Society, April 4; Fond DuLac, Wisconsin Community meeting, April 18; University of Michigan Student Body, May 13; Wayne University Student Body, May 15; Wayne County Druggists, May 12; and the Monroe Kiwanis Club, May 25.

* * *

A summer camp for diabetic children will be conducted for the second season under the auspices of The Chicago Diabetes Association, Inc.

Because the first season was so successful, a larger group of campers of wider age ranges will be accommodated this year at Holiday Home, Lake Geneva, Wisconsin, from August 8 to August 29.

In addition to the regular personnel of the Camp, there will be a staff of dietitians and resident physicians, trained in the care of diabetic children, furnished by The Chicago Diabetes Association.

Boys and girls, ages eight to fourteen years inclusive, will be accepted at a fee of $120.00 (which covers three weeks camping and transportation from Chicago.) Fee reductions may be arranged according to circumstances.

Physicians are requested to notify parents of diabetic children and to supply the names of children who would like to attend. Correspondence should be addressed to The Chicago Diabetes Association, 950 East 59th Street, Chicago 37, Illinois.

Limited capacity requires prompt application.

* * *

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PREVENTIVE PEDIATRICS

(Continued from Page 658)

units have been used and ingestion of 100,000 to 200,000 units of penicillin daily have been reported to be effective by many writers. Kohn and associates tried penicillin in doses of 200,000 units four times a day for the first week in each month and reported no recurrences of rheumatic fever in the treated group. Two control groups showed 11 and 19 per cent recurrences.

Both the sulfa group of drugs and penicillin have been shown to discourage the growth of group A hemolytic streptococci in nose and throat cultures of patients with chronic rheumatic fever. Both drugs have disadvantages. If one of the sulfa group of drugs is employed, repeated urine and blood studies are necessary as a safety measure. Both groups of drugs have been found to allow drug-fast pathogens to be cultured. The use of either sulfadiazine or penicillin as prophylactic agents should be used in the opinion of most writers. It is wise to repeat the course of prophylactic drug for at least five years in succession, as it is known that the longer the interval between recurrences, the less chance of chronic heart muscle damage.

Perhaps as many as two-thirds of all ovarian carcinomas are bilateral; few benign growths appear in both ovaries.

THE THERAPY ON NON-TUBERCULOUS URINARY TRACT INFECTIONS

(Continued from Page 681)

fact, one is often happily surprised in treating an infection which proves refractory to all the new agents to find it quickly responsive to one of these cheap and time-honored remedies.

The treatment of persistent amicrobic pyuria in the absence of urinary tract tuberculosis, is often nicely accomplished by the aid of intravenous arsenicals such as mapharsen or neoarsphenamine. The latter drug given in doses of 0.3 to 0.6 gram intravenously two to three times per week for one-and-a-half to two weeks is usually effective. In view of the known effectiveness of aureomycin in virus infections, therapeutic trial of this agent in amicrobic pyuria will be of interest in the future.

Summary

1. The desirability of standard practices in the collection and examination of the urine for the diagnosis of urinary tract infections is stressed.

2. The necessity for detailed examination of the urinary tract in the face of failure of an initial trial of therapy to rule out contributing factors is emphasized.

3. The use of the chemotherapeutic and antibiotic agents now available to the physician is discussed from the standpoint of the therapy of acute and resistant urinary tract infections.

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Acknowledgment of all books received will be made in this column, and this will be deemed by us as a full compensation to those sending them. A selection will be made for review, as expedient.

CLINICAL PATHOLOGY. Application and Interpretation. By Benjamin B. Wells, M.D., Ph.D., Professor of Medicine, University of Arkansas School of Medicine, Little Rock, Arkansas. Illustrated. Philadelphia: W. B. Saunders Co., 1950. Price, $6.00.

While this type of book is an important one to place in the hands of the medical profession, its content under different titles is probably more ably presented in other books. Portions of it, such as the laboratory procedures employed in gastrointestinal diseases and their significance, are very good from a clinician's standpoint. On the other hand, it does not exactly conform to the consensus in the evaluation of certain liver function tests. Hematology, from a clinical standpoint, is not presented particularly well and rather than relying on this book, one should consult some of the more recent clinical works in this specialty.

The book, for a slender volume, does pack a lot of material between its covers, but perhaps the effort to be all-inclusive is its major fault.

A.A.H.

SAW-GE-MAH (Medicine Man). By Louis J. Gariepy, M.D., Saint Paul, Minnesota: Northland Press, 1950. Price $3.00.

Saw-Ge-Mah is a delightful story of the life of Dr. Hal Adams. The hero struggles against almost insuperable odds to gain advancement toward his ambition to study medicine. The course is long, but leads to success. The young doctor advances to success by strict attention to the rendering of the very best care of which he is capable. In order to give his people even better attention he establishes a clinic. Later he is instrumental in establishing a Sisters of Mercy Hospital in Detroit, and becomes Chief of Staff. In the meantime, after starting general medicine, he has given his attention to surgery and becomes a recognized surgeon. But he gives up his specialty during the depression years in order to give better care to his patients.

At the close of the book, after the doctor and his wife return from Italy, where he presents a paper at the International College of Surgeons, the hero resigns his hospital appointment in Detroit and returns to the Bluff-town of his origin where he again becomes Saw-Ge-Mah to his Indian friends who gave him his first start.

The book is supposed not to be autobiographical, but is a most complete and excellent historical novel of the biographical order. Those of our readers who know Lou Gariepy will be delighted to read his book, and for those who do not know the author, a treat is in store.

NAPT BULLETIN, October, 1949. Bulletin of the National Association for the Prevention of Tuberculosis, London, England.

The back cover carries in color the Tuberculosis cross, the same as we use, and the legend "Buy Christmas Seals."

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TRENDS IN GYNECOLOGY AND OBSTETRICS

(Continued from Page 655)

cially eclampsia and severe pre-eclampsia, is diminishing slightly yearly without stilbestrol. We are preparing a more careful review of this apparent tendency so that expectancy figures without stilbestrol can be more exact for our group. When we use expectancy percentages published by Dieckmann[7], Page and Cox, Torpin et al, it produces expectancy figures much higher than any we actually experience.

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Specificity of Antithromboplastic Activities

(Continued from Page 685)

boemboli known to the pathologist. When blood serum from human subjects or from various animal species is mixed with the extracts, they are less toxic. This detoxication has been attributed to a substance called antithromboplastin because it was presumed to act directly on thromboplastin. It could, however, act on prothrombin, Ac-globulin, or even other activators. Proof for the specificity of the antithromboplastic activity is still necessary.

The preparation of antithromboplastin demonstrates the specificity of its action. A crude lung extract was sedimented in the Sharples centrifuge. The large molecular size of thromboplastin makes this possible. The sediment was decalcified by suspension in a potassium oxalate solution. This presumably disrupts the thromboplastin-antithromboplastin complex. When the decalcified suspension is resedimented, the precipitate contains thromboplastin, while the supernatant fluid is an anticoagulant. This supports the concept of a specific binding between the inhibitor and the thromboplastin, and thus that the anticoagulant is truly an antithromboplastin.

The material was also shown to be antithromboplastic by use of the two-stage method for the study of blood coagulation. Prothrombin, Ac-globulin, and thromboplastin are known to be involved in the physiological formation of thrombin. When the inhibitor was incubated separately with each of these substances, the only observable effect was on thromboplastin. The activity of this clotting factor was reduced by a very significant and easily detectable amount.

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THE JOURNAL
of the Michigan State Medical Society

VOLUME 49 JULY, 1950 NUMBER 7

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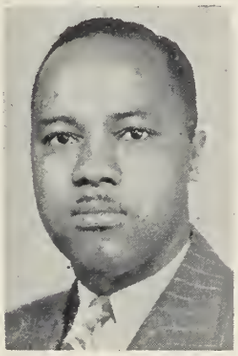

R. J. Arrington, M.D.

C. S. Kennedy, M.D.

R. P. Reynolds, M.D.

MSMS ANNUAL SESSION

September 20-21-22, 1950

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DOCTOR—YOU ARE INVITED

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of the Michigan State Medical Society

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Delegates

W. D. Barrett, M.D., Detroit.....1950
W. H. Huron, M.D., Iron Mountain 1950
R. L. Novy, M.D., Detroit.....1950
L. G. Christian, M.D., Lansing.....1951
W. A. Hyland, M.D., Grand Rapids 1951

Alternates

R. A. Johnson, M.D., Detroit..... 1950
R. H. Denham, M.D., Grand Rapids 1950
C. I. Owen, M.D., Detroit.....1950
H. H. Cummings, M.D., Ann Arbor 1951
E. C. Texter, M.D., Detroit.....1951

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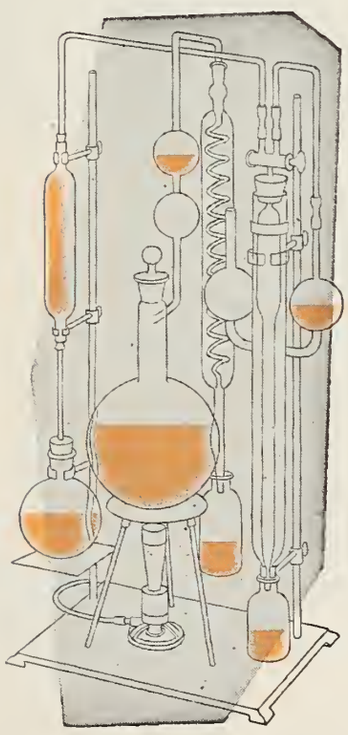

Surgeons are now generally coming to the conclusion that the use of aureomycin preoperatively and postoperatively in all cases is worthwhile insurance against infection. This is particularly true in infections involving the peritoneum.

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Say you saw it in the Journal of the Michigan State Medical Society

You and Your Business

157 VS. 25

One hundred and fifty-seven Michigan doctors of medicine have appeared on the program of the Michigan Post-Graduate Clinical Institute since its inception in March, 1947. During the same period, twenty-five out-of-Michigan doctors have delivered papers at the Institute.

The Committee on Program for the 1951 Institute has decided to follow the pattern which has proven so successful in the past two years—at the 1949 and 1950 Institutes—which resulted in an annual increased attendance culminating in an all-time high registration of 1,875 at the Institute last March in Detroit. A ratio of approximately two-thirds Michigan men and one-third out-of-Michigan speakers will be presented on the program of the 1951 Michigan Post-Graduate Clinical Institute. The Program Committee feels that the 38 scientific presentations in March, 1951, will make a most interesting package that will attract a record-breaking crowd of doctors of medicine from Michigan, Ontario, Northern Ohio and Northern Indiana to the Motor City on March 14, 15, 16, 1951.

—. Get Out the Vote —

REBELLION LICKS SOCIALISM

"A rebellion of the middle class has licked Socialism in England" says Raymond Moley, nationally known contributing editor to *Newsweek* magazine. Mr. Moley's remarks were made before the members of the Illinois State Medical Society on the occasion of their annual dinner in May.

Mr. Moley, having just returned from a two-month visit to England, noted that the Labor party didn't dare tell the truth about the rising costs of the Socialistic experiments during the recent election. But the bad news came out with the submission of the new budget, particularly on the national health insurance scheme. To an original estimate for 1948-49 of 560 million dollars, Parliament had to add 218 millions for a total of 778 millions. The estimate for 1949-50 was 668 millions. But the Ministry of Health had to ask for *274 millions more.*

The returning editor also pointed out that the compulsory health insurance cost of 1.1 billion dollars is a heavy burden on Britain which has a national income one-eighth to one-tenth the size of ours. Transferred to our country, such a burden would amount to about 8 billion dollars per year for socialized medicine, a burden which could not be sustained.

— Register Before August 23 —

MEDICAL MEETINGS AND CLINIC DAYS

On June 8, in Lansing, representatives of the Calhoun, Genesee, Ingham, Jackson, and Kent County Medical Societies met for the first time to arrange dates for their 1951 Clinic Days, in order to eliminate duplications and conflicts that cut down maximum attendance. A partial list of medical meetings and clinic days, scheduled for 1951, follows. THE JOURNAL invites all county medical societies, hospital staffs, and physicians' groups which plan regular one-day clinics during 1951 to notify the Editor of the exact date and place of the scheduled meetings. A copy of the complete program, to be submitted two months before mailing date of JMSMS (12th of each month) is requested, for publication to THE JOURNAL'S 5,700 readers:

January 31, 1951	Mt. Carmel Mercy Hospital Clinic Day.....Detroit
February 8 or 15, 1951	Jackson County Medical Society's Clinic Day.....Jackson
March 6, 1951	Calhoun County Medical Society's Clinic Day.....Battle Creek
March 14-15-16, 1951	MICHIGAN POSTGRADUATE CLINICAL INSTITUTE .....Detroit
April, 1951	Second Michigan Industrial Health Day.....Detroit
April 11, 1951	Genesee County Medical Society's Cancer Day.....Flint
April, 1951	Highland Park Physicians Club Clinic....Highland Park
May 3, 1951	Ingham County Medical Society's Clinic Day.....Lansing
May, 1951	Western Michigan Clinic Day (Sponsored by Kent County Medical Society).....Grand Rapids
May, 1951	Bay County Medical Society's Physical Medicine Clinic Day.
June, 1951	St. Clair County Medical Society's Clinic Day.....St. Clair
September 26-27-28, 1951	MICHIGAN STATE MEDICAL SOCIETY ANNUAL SESSION.....Grand Rapids

— Get Out the Vote —

(Continued on Page 762)

Throat Specialists report on 30-day test of Camel smokers:

"Not one single case of throat irritation due to smoking Camels!"

Yes, these were the findings of throat specialists after a total of 2,470 weekly examinations of the throats of hundreds of men and women who smoked Camels—and only Camels—for 30 consecutive days.

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HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of May 17, 1950

- Monthly financial reports, including detailed breakdown of the Public Education Account and of the Public Education Reserve Account, were presented, studied and approved.

  Bills payable for the current month were presented, approved and authorized for payment.
- University of Michigan Medical School Centenary: A scroll fittingly commemorating this event was authorized to be presented to University of Michigan officials on the occasion of Officers' Night on September 20 during the MSMS Annual Session; also a full page in the Annual Session Program is to be devoted to the Centenary.
- E. G. Merritt, M.D., Detroit, was appointed as MSMS representative on the Michigan Nursing Center Association's committee studying the problem of providing better nursing care in state mental institutions.
- Material for consideration of members of the newly formed Committee on Atomic and Allied Procedures, as presented by President-elect C. E. Umphrey, M.D., was authorized transmitted to the committee.
- A progress report on the "Good Citizenship Campaign" was presented.
- Appointments of Annual Session Assembly Chairmen and Secretaries and of Discussion Conference Leaders and the Scientific Press Committee for the 1950 meeting in Detroit were presented and approved.
- Report on U. S. Pharmacopeia Convention, presented by the MSMS delegate, was received with thanks; also the report on the Second Conference on Physicians and Schools, arranged by the AMA and held in Chicago, was accepted with thanks.
- Report on National Emergency Medical Service Conference, Chicago, April 22, presented by Harry F. Becker, M.D., Battle Creek (Chairman of MSMS Emergency Medical Service Committee) was approved with the request that Doctor Becker carry on this important work, that his recommendations be implemented through the MSMS Secretary's Letter and THE JOURNAL, and that he be requested to send his specific plans in writing to the Executive Committee of the Council for discussion at its June meeting.
- Color television of surgical operations is being planned for the MSMS Annual Session in Grand Rapids, September, 1951, through the co-operation of Smith, Kline & French Laboratories, Philadelphia, Pa.
- Two MSMS representatives to sit in at the next meeting of the Medical Jurisprudence Committee of the State Bar of Michigan, as requested by the committee's chairman, were appointed: C. E. Umphrey, M.D. and E. A. Osius, M.D.
- The monthly progress report of the Public Relations Counsel included report on (a) the hourglass campaign; (b) MSMS films; (c) Michigan Health Survey; (d) Work of the Field Secretaries; (e) Speakers' Bureau activities; (f) CAP Session at Upper Peninsula Medical Society meeting, June 23, 1950; (g) health supplement in Detroit newspapers during the MSMS Annual Session; (h) MSMS exhibit at county fairs in Michigan.
- Endorsement of political candidates; this was discussed and the following motion was carried unanimously: "It is the consensus of opinion of the Executive Committee of The Council that it is not politic for the Officers, Councillors and administrative personnel of the Michigan State Medical Society to endorse the candidates of any political party on the state level."
- The annual joint session with Michigan's Delegates to the AMA House of Delegates was held and included the study of various resolutions from other state medical societies, the subject of dispensing of eye glasses, et cetera.

  Ralph A. Johnson, M.D., Detroit, first alternate, was chosen to represent MSMS as a delegate at the AMA Session in June, 1950, in lieu of L. G. Christian, M.D., Lansing, who stated he would be unable to attend the San Francisco meetings.
- Monthly progress report of the Rheumatic Fever Co-ordinator was accepted.
- Report on MSMS representatives' trip to Washington, D. C., May 1-3 was presented by Secretary L. Fernald Foster, M.D., Bay City.
- The following committee reports were given consideration: Cancer Control, meetings of January 26 and April 6; Permanent Conference Commit-

(Continued on Page 806)

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1. Beckman, H.: Treatment in General Practice. Philadelphia, Saunders, 5th ed., 1946, 704-705.
2. Beckman, H.: Treatment in General Practice. Philadelphia, Saunders, 6th ed., 1948, 744.

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Dr. Narayana Visits Michigan Medical School

Dr. Basudeva Narayana, Principal of the Prince of Wales Medical College and Professor of Physiology, Patña, India, recently visited different departments at the University of Michigan College of Medicine and Wayne University College during a short stay in Detroit of about four days.

He wanted to familiarize himself with undergraduate teaching of medicine, postgraduate teaching and facilities available for research and he was greatly impressed by what he saw at the medical schools. He felt strongly that more students from India should visit and study at the University of Michigan, staying at Detroit and Ann Arbor, for a quiet place for serious study.

His impression of Ann Arbor was principally that it is a university town on the model of Oxford and Cambridge (England) and St. Andrews (Scotland) of the United Kingdom.

The various research problems that are being planned impressed him greatly and he expressed the wish that he might stay longer, so as to actively participate in the work of the problems that are at hand.

At the International Center in Ann Arbor he met a large number of students from different parts of the world who are studying there.

In addition to the Michigan schools, he has visited the medical schools at Johns Hopkins University in Baltimore; University of Pennsylvania in Philadelphia; Cornell University, Columbia University and New York University in New York City; Yale University at New Haven; Harvard University at Cambridge; Boston University and Taft University in Boston; University of Syracuse; University of Rochester; Western Reserve University in Cleveland; University of Illinois, Northwestern University and University of Chicago in Chicago; University of Minnesota in Minneapolis; and the Mayo Clinic at Rochester, Minnesota.

Dr. B. Narayana holds the M.D. and M.S. degrees of the University of Calcutta, Ph.D. in Physiology from the University of Edinburgh. Having studied first with Prof. Sir Edward Sharpey-Schafer and later under Professor I. de Burgh-Daly (F.R.S.E.) He is a Fellow of the Royal Society of Edinburgh and of the National Institute of Science of India (F.N.I.). He is a member of the Physiological Societies of India and Great Britain, and a member of the Indian Medical Association. He is also the associate serving brother of the Order of St. Johns Ambulance Association.

Dr. Narayana is visiting on a travel fellowship of the United Nations World Health Organization to study medical education in the United States and Great Britain. When he returns to India he will submit his observations on the medical institutions visited by him, and it is possible that the future of medical education in India may be modified by the light of his observations.

According to Dr. Narayana, there has been a great increase in the number of medical colleges in India in the last five or six years. The number now stands at about thirty-two. The departments are developing very rapidly, and the government of India is up-grading a number of institutions for higher education and research. The Physiology Department at Patña, where Dr. Narayana is working as professor is one of the departments selected for such an up-grading.

The graduate teaching is being reorganized to produce good teachers for the various medical colleges of the country. The public health teaching is also being looked after efficiently, inasmuch as a number of whole-time chairs in the subject have been created at certain medical colleges so that students may attach equal importance to the curative and preventive side of medicine. Apart from this, an increasingly large number of young medical graduates are carrying on studies in postgraduate medicine in the United States and in Great Britain. When they return, after proper qualification they will be of great assistance in the various teaching institutions.

The number of students in a medical college varies from fifty to one hundred and twenty. The newer colleges have the lesser number, although a few institutions have temporarily increased their number to more than one hundred and twenty.

(Continued on Page 804)

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Bibliography: 1. Loveless, M. H., and Dworin, M.: J. Am. M. Women's A. *4*:105, 1949. 2. Schiller, I. W., and Lowell, F. C.: New England J. Med. *240*:215, 1949.

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Editorial Comment

HORSEFEATHERS, MR. EWING!

This is a terrible thing, Oscar would have us believe. The AMA, he says, has spent some $3 million opposing compulsory health insurance but hasn't come up with "a practical plan of its own."

Here is the essence of the Fair Deal thinking. A "plan" is necessary. A plan is always absolutely vital. American medicine must be taken out of the hands of those who have pushed it to world leadership in research and maintenance of public health and be placed within the confinement of a specific government control plan. The plan comes first, whether there is an ounce of reason in favor of it or not. And the best way to get it into effect is through federal pressure, with public tax money, and with political nonenities such as Oscar Ewing to run it.

For Oscar Ewing to criticize the AMA for collecting membership money to fight compulsory medicine is a new pinnacle of hypocrisy. The $3 million spent by AMA to oppose the political straitjacket is peanuts compared to the sums the backers of one or another federal panacea, sling around to "inform the public." Under the feeble guise of public relations, there has grown up in Washington a gargantuan corps of paid publicity agents, who do nothing but flood the mails with propaganda espousing the schemes of bureaus and departments. Maintenance of the aggregate number in Washington runs into millions.

The loudly professed altruism of men such as Oscar Ewing fails to impress us. The new cry in Washington is "Salvation," but we notice it always proceeds from the well-placed political hack with nothing to lose but the public's money.

Oscar Ewing and others of his ilk, and they are legion, could vanish from the Washington scene tomorrow and their departure would not make the slightest difference to the ultimate welfare of the average citizen.—Editorial, *Idaho Stateman,* May 17, 1950.

MONDAY WASH LINE

BINGAY: Your defense of the medical profession against the sound criticisms of Oscar Ewing, director of the Security Agency, sounds to me like paid propaganda. Do they pay you or do they just take care of you free when you get more burned up than usual? Most doctors are fakers and the "profession" needs government supervision.

E.L.T.

ANSWER: I cannot print the rest of your letter which is a long tirade against an individual doctor whom you name, regardless of libel laws, because of some real or fancied grievance. I am defending a profession and not an individual.

As for "pay," let me assure you the doctors who cared for me when I was almost fatally burned in that explosion recently, received their full financial remuneration. I wanted it that way because I wanted to mention them by name in my stories and, if I did so and they had not been paid, nasty minded persons like yourself might make just such accusations. There is also a code of ethics in journalism, you know.

The whole thought of the world seems blighted by the materialistic concepts of Karl Marx and his Communists who deny the existence of God and of any intangible values.

So let me say that all the money on earth would not be a sufficient amount to pay the doctors who have stood by me through the years of my life, beginning with the long illness of my mother when I was a little boy and ending as of today with the miracle of my recovery from burns at which you sneer.

These are the spiritual values, the days—and, more—the long nights of patient fighting, great tenderness and sacrifice that you would not understand. 'Tis best expressed in Ian Maclaren's "Doctor of the Old School," in his book, "Beside the Bonnie Brier Bush."

It is not money with me, dear sir, but an unpayable debt of gratitude. When the Wayne County Medical Society—"in recognition of his contributions to the advancement of medical science"—elected me an honorary member because, in part, of my story on Sir Ronald Ross, discoverer of the malaria-carrying mosquito (for which, incidentally, I was granted a Pulitzer Award) I said, back in 1933:

There are many kinds of courage.

The true physician must have the courage of a

(Continued on Page 768)

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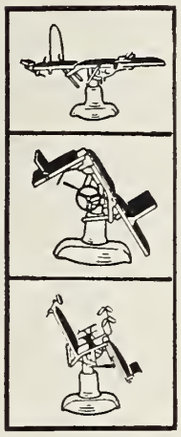

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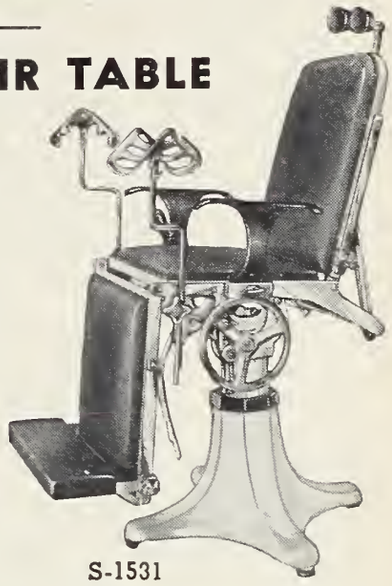

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MONDAY WASH LINE

(Continued from Page 766)

priest in being the father-confessor for many sins and yet not lose his faith in his fellows: A general instils courage in his soldiers by his inspiring presence; so it is with the physician. He must keep alive the light of faith not only in his patient but in his patient's family and in himself. His will must dominate when his heart is filled with doubts. He holds a human life in the hollow of his hand and must have the God-given courage to keep that hand cool and steady.

We talk glibly of medicine as among the ancient arts, but as a matter of fact, the science of medicine, the actual science, is little more than a century old. Before that is a long historical patchwork of empiricism and conjecture ending, we might say, with William Harvey.

But oh, the glory of the last one hundred years! War in all its bloody history of brave deeds, cannot match the long, long list of valiant knights whose names are emblazoned on the honor rolls of medicine.

Bichat, Laennec, Liebig, Bernard, Helmholtz, Darwin, Pasteur, Lister, Baillie, Rokitansky, Bright, Morgagni, Virchow, Schonlein, Louis, Gerhard, Schwann, Koch, Jenner, Frankel, Laveran, Klebbs, Manson, Loeffler, Behring, Ehrlich, Osler, Rush, Ross—the names of the illustrious dead seem endless. And a brilliant army of the living are carrying on.

The plaques that once swept the world have been very largely eliminated. Every generation shows that you have given to mankind a longer span of life. Man is healthier and happier because of the mighty legionnaires of medicine.

I had this sharply called to my attention the other night while reading a volume on the life of Shakespeare. It stated casually that he died at 52, "in the fullness of his years." That startled me. I began looking into the matter and found to my surprise that in the Elizabethan era a man at 50 was considered aged. Few people lived to be that old.

Today when a man is 50 he considers himself a youngster and when he is 60 if he cannot break an 80 on the golf course he blames the caddie or the course or his partner for his bad score—never his age.

Your profession is on the threshold of vast new discoveries that will revolutionize life on earth. For you alone remains the romance of great adventure. That is why I envy you and stand in awe of you and am proud and happy to be honored by your gift of membership.

But no matter how far you go into this new found continent of science there is a golden chain that binds you always to us. It is a magic chain. If it is ever broken your quest for the golden fleece of knowledge will be in vain. The links of that binding force are your human contacts. Though you walk with kings you cannot lose the common touch. Still the greatest joy of your tasks will be to soothe a fevered brow and to bring into world-weary eyes the light of hope. To you is dedicated the great task of keeping alive man's faith in himself.

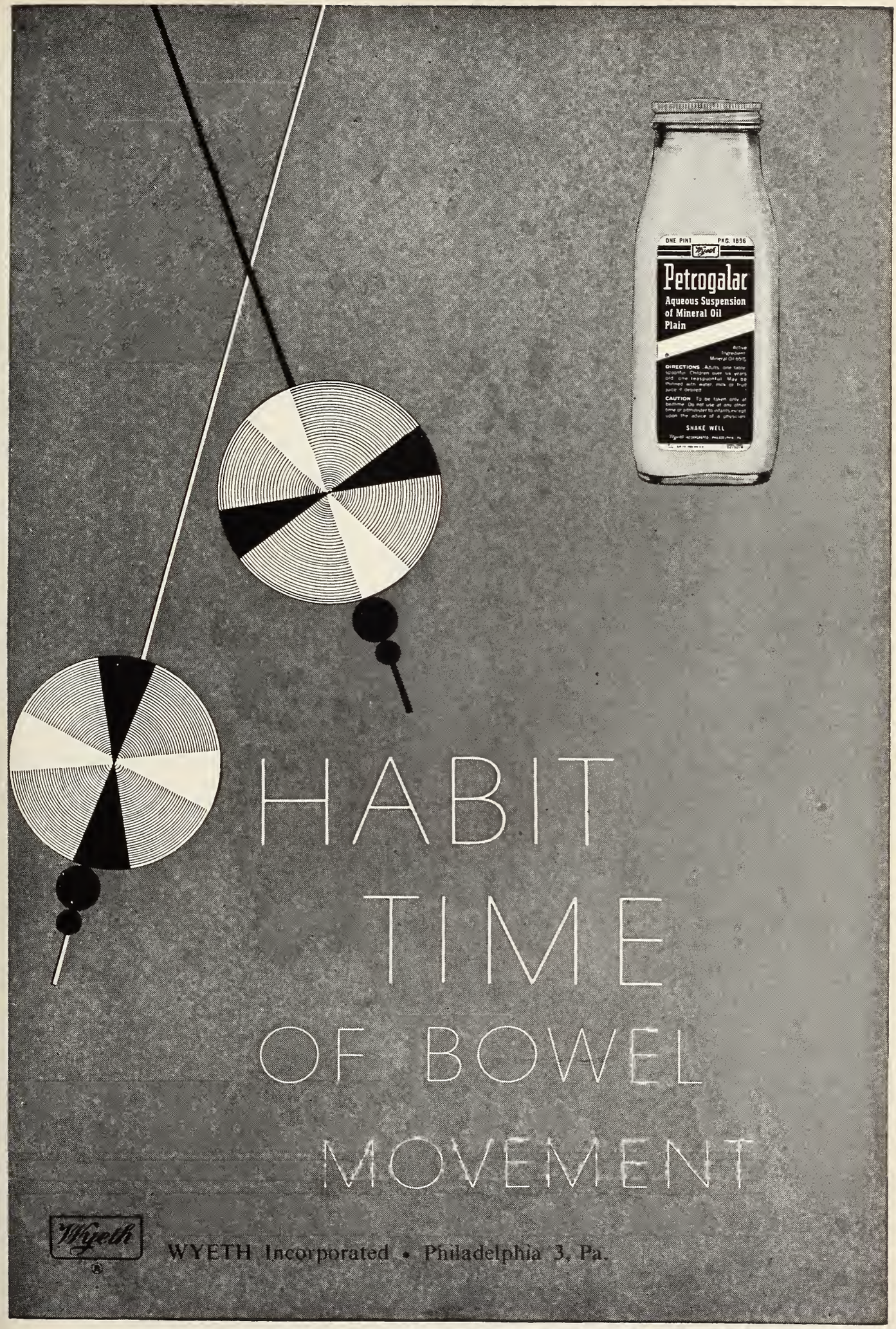
Yours is the most poignant and gripping and all-consuming drama of life. The truly great doctor must possess all the virtues of all the other sciences and professions. You bring forth the babe's first air-drawn cry and you close his tired eyes in death as age comes upon him.—Published by permission. Malcom W. Bingay, *Detroit Free Press,* May 29, 1950.

HAVE YOU DONE YOUR PART?

Political medicine is a threat to our professional liberties. Most physicians appreciate this fact but too many have been lulled into a sense of false security believing that the battle can be won by a team of clever publicists and a handful of men interested in medical economic problems. But it can be done if we do our part by combating the grievances that are perpetuating the fight. The matter of fees is one of the objections to the medical profession; the other is the inability of the physician to provide twenty-four-hour service.

We can say truthfully that the majority of physicians do not overcharge but like the rotten apple that spoils the barrel, the few that do overcharge are creating the examples for our opponents to use. The fees that most physicians charge are comparable with those of other professions and those who work on a commission basis. The laborer, for example, who at the moment is most prone to criticize, pays more in commissions for a new car than he does to his physician for a serious ailment. In addition, the family who has had occasion to call in a plumber or electrician, or have a television set installed, have paid bills equal, if

(Continued on Page 770)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HAVE YOU DONE YOUR PART?

(Continued from Page 768)

not higher, than the average house call. But this is not all. Our fees are justifiable considering the investment of time and money that has been spent in preparing for the career, equipment, and cost of maintenance. Furthermore, the skill of the physician is an intangible something that is difficult to evaluate. In many instances it is priceless. The experience and knowledge that some have acquired is more precious than gold when a correct decision means saving a life.

On the other hand, it makes no difference what we think along this line as long as the voters feel that they are being overcharged. Rationalization does no good because the fact remains that we now stand accused as a body. The public probably never has taken into consideration that we belong to a profession which has more than the ordinary opportunity to exploit our fellow man. We cannot, nor are we, being accused of this. Most physicians are fair, generous and trustworthy. The medical profession has made many advancements and the more diseases we can prevent and cure the better. To offset the criticism of our profession we must begin by taking action against the small minority who are breaking faith. This group, incidentally, will give us just as much trouble in case socialized medicine becomes a reality. A grievance committee should be considered seriously and the results publicized so that the people will know that a housecleaning is being carried on.

But this is not all. In this day and age the individual is entitled to an estimate of what medical service will cost. Nine times out of 10 this is possible but too many physicians wilt when it comes to a discussion of money matters. They are shy and embarrassed when confronted with this question instead of being dignified and positive as they are in matters related to health. This creates a bad impression, especially when the physician hesitates to speak about the fee and then sends a whopper of a bill. Many patients feel that they have a right to know what our costs will be because they are entitled to refuse to obligate themselves for a bill that is beyond their means. They do not appreciate the fact that most physicians would rather treat the patient first and worry about the bill later.

Nowadays dissatisfied customers know how to advertise their resentment. They write their friends, congressmen and newspapers. But this form of retaliation is nothing compared with the penalty that occurs when they climb on the band wagon and decide to vote for socialized medicine. Yes, it is going to take more than money to win this battle. Since most physicians value goodwill above everything there is no reason why we cannot concentrate our efforts along this line.—Editorial, *Journal of the Illinois State Medical Society*, May, 1950.

MICHIGAN HEALTH COUNCIL ACTIVE

Launched on its present expanded activities program fifteen months ago, the Michigan Health Council has become one of the country's outstanding organizations of its kind. Its leadership in Health Council activities and planning is recognized in many areas of the country—fifteen other states have sought information concerning the blueprints and structure of the Michigan Health Council.

Backed from the start by MSMS, the Health Council has developed a series of health projects and has held fast to the concept that good health is a Community function.

Defined as its major project in 1949—and continued as its first objective in 1950—is the business of offering stimulation, co-operation and assistance to any Michigan community interested in establishing or expanding a community health council. Once such a community organization is established or in being, it is invited to participate in the Health Council activities through an associate membership arrangement provided in the Michigan Health Council by-laws. Twenty-two such community councils have taken associate membership during the past year, and organizational work is going on currently in three additional counties.

Voting membership in the Council is restricted to Michigan organizations which (1) have a major interest in health; (2) operate on a state-wide basis and (3) contribute financially to the support of the Health Council. Twenty-one important health organizations have joined the Michigan Health Council on this basis.

Other important projects running concurrently with this membership expansion program include the production of a Directory of Health Services in Michigan, to be followed by the establishment of Health Information Centers in various parts of the state.

Brookings Institution

The Michigan Health Council recently was successful in encouraging the Brookings Institution to use Michigan as one of the pilot study states in a comprehensive study of the Availability of Medical Facilities in the U. S. The Health Council will collaborate with Brookings and guide the Michigan area study.

(Continued on Page 790)

"The ... estrogen preferred by us is 'Premarin,' a mixture of conjugated estrogens, the principal one of which is estrone sulfate."

Hamblen, E. C.: North Carolina M. J. 7:533 (Oct.) 1946.

In treating the menopausal syndrome with "Premarin," Perloff* reports that "Ninety-five and eight tenths per cent of patients treated with 3.75 mg. or less daily obtained complete relief of symptoms"; also, "General tonic effects were noteworthy and the greatest percentage of patients who expressed clear-cut preferences for any drug designated 'Premarin,'"

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*Perloff, W. H.: Am. J. Obst. & Gynec. 58:684 (Oct.) 1949.

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Cancer Comment

RECTAL EXAMINATIONS ARE IMPORTANT

The following article which appeared in the January-February, 1950, issue of *The Cancer Bulletin,* published in Houston, Texas, is reprinted with the consent of the editors of that publication. The value of proctoscopic examinations and their interpretation in the search for early cancer of the rectum and sigmoid is so important that this paper can be read with profit by all physicians.

FIVE MINUTES AND TEN INCHES

The physician can make a thorough rectal inspection, using a 10-inch proctoscope, in approximately five minutes. This examination will detect 70 per cent of all malignant lesions of both the colon and rectum. Certainly, any rectal polyp in the area will be immediately apparent. This is important, for rectal polyps are generally regarded as premalignant growths. But seldom do they present symptoms; usually they are discovered only during a routine proctoscopic examination. And far too often, this examination was made only because the patient gave evidence of having rectal cancer.

Many proctologists insist that a thorough rectal examination should be included in every general examination. When rectal polyps are discovered, the patient should have a double contrast barium enema study to rule out polyps higher in the colon. More often than not, the discovery of one polyp means that the patient already has one or two more—or will have, in due time. The patients should always receive regular follow-up study. In persons with an inherited tendency toward the diffuse type of polyposis, such studies should be made during late adolescence whether the patient presents actual lesions or not; for he will have lesions, almost surely, by the time he reaches adulthood.

Rectal polyps are considered the most important single factor leading to carcinoma of the large bowel. This becomes especially important when one considers that one investigator found that nine per cent of 1400 persons examined had polyps. Of these lesions, 44 per cent were in the rectum and sigmoid. Finally, most authors agree that sooner or later practically all polyps become cancerous.

Once a polyp is found, therefore, there is only one thing to do: remove it. If microscopic studies prove the entire lesion to have been benign, careful studies should still be made at six-month intervals. But if malignant tissue is found in a polyp with a broad sessile base, simple removal will not suffice. Wide resection is the only choice. The pedunculated polyp may be removed by the diathermy loop, and the stump sealed by cautery or fulguration.

Eighty per cent of all patients with rectal cancer could be cured if the lesions were removed within six months after they appeared. Obviously, since most physicians do not make digital or proctoscopic examination a part of their routine physical check-up, many polyps are being overlooked and many patients are being doomed; with a little more time and effort, they could be saved. Other patients must undergo extensive surgery for advanced lesions, surgery which would have been unnecessary had the physician taken the time to make a rectal examination. In view of the well-recognized fact that better survival rates for patients with rectal cancer will occur only when earlier diagnosis is made, it is mandatory that that extra time be taken—five minutes, that is.

CANCER BULLETIN ANNOUNCEMENT

With the last mailing of the *Michigan Cancer Bulletin* in December, 1949, to all members of the Michigan State Medical Society, a card was enclosed asking for an opinion on whether such a publication should be continued. The replies were almost unanimously (98.5 per cent) in favor of this type of professional cancer education. With this appreciation in mind, the Cancer Control Committee explored ways and means for continuing the program and decided on the following plan:

For the year beginning July 1, *The Cancer Bulletin,* from which the article on this page was reprinted, will be distributed bi-monthly by the Michigan Department of Health to all physicians and hospitals in Michigan under the joint sponsorship of the Cancer Control Committee and the health department. *The Cancer Bulletin* is now sent regularly to more than 100,000 physicians in more than half the states. For the next year Michigan physicians will be able to enjoy and profit from its timely articles and reviews.

Chemical or heat removal of moles are "half way" measures that have not opportunity for microscopic diagnosis.

. . .

Rarely does a mole show signs of malignant degeneration before puberty.

. . .

Bleeding nipples are usually due to duct papilloma, intracystic papilloma or carcinoma.

. . .

Different investigators have reported from six to fifty-four per cent of bleeding nipples as due to carcinoma.

. . .

If a keratotic growth is on the mucous membrane of the lips it should be removed immediately upon diagnosis. Complete excision is usually the treatment of choice.

. . .

Seborrheic keratosis does not generally become malignant.

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Gaucher's Disease

Discussion and Case Presentation

By William Henry Gordon, M.D., and
Jack M. Kaufman, M.D.

Detroit, Michigan

ONE OF the metabolic diseases which we seldom consider is Gaucher's disease. When it is included in the differential diagnosis it is regarded as a very rare disease associated with marked splenomegaly and bleeding diathesis. This is partially true as there are many other distinguishing and limiting characteristics. The variegated clinical picture of this disease, its relationship to hypersplenism and recent advances in understanding Gaucher's disease, are reasons for undertaking this study.

In 1882 Gaucher described the disease, named after him, as a primary epithelioma of the spleen. Its neoplastic nature was not disputed until studied by Bovaird of New York in 1900. Mandelbaum and Downey were among the first to consider this disease as belonging to the metabolic family. Its chemical nature was studied by Lieb and Epstein who singled out kerasin as chief component of the lipoid macrophages.

Symptomatic Gaucher's disease is not common as less than three hundred cases have been reported. There have been many more people with Gaucher's cells distributed through their body who were entirely asymptomatic. These cases may be regarded as subclinical Gaucher's disease and some have been proven to be carriers. This point is stressed by J. Graun[8] who has made an extensive study of the hereditary mechanism of Gaucher's disease. Another interesting feature is that the progeny of parents with Gaucher's disease are limited. This has been postulated to be due to intrauterine Gaucher's disease.[8] This accounts for the previously erroneous assumptions that it was non-familial and not a hereditary disease. There also seems to be a tendency for each succeeding generation to have the disease at an earlier age in a more severe form. This is highly reminiscent of the hereditary transmission of diabetes with its increasing severity and earlier occurrence in each generation.

When first described it was thought to be limited to Hebrew female infants. This has been disproven. It may occur at any age. It is conceded to be more common during the first ten years although cases have been reported in adults up to and including the eighth decade.[15] The finding of Gaucher's cells in the sternal marrow does not detract from a normal asymptomatic existence. There is an acute fulminating type found in infancy, characterized by protean neurological symptomatology and early death. This will be discussed further under clinical course.

The underlying feature of Gaucher's disease is disturbance in metabolism and storage of a particular lipoid called kerasin. In discussion of pathogenesis it is considered to involve one of two primary mechanisms: (1) this lipoid is found in excess amounts due to a failure of certain enzymes and ensuing chemical reactions, (2) increased production of kerasin within the body cells. Thannhauser and co-workers[20] demonstrated that normal serum or serum from patients with Gaucher's disease did not contain measurable amounts of cerebrosides, proving the cerebrosides did not originate as a result of general lipid disturbance of metabolism, but were synthesized and stored in the cells (Gaucher's cells). Kerasin was not formed and then transported to the lipid histiocytes; it

originated in those cells. This is the result of imbalance between enzyme formation and kerasin production. This dyscrasia is the result of an excess presence of galactoside cerebroside (kerasin) and glucoside cerebroside.

Forementioned cerebrosides are lipids with attached glucose and galactose groups. Thus, in any specific case of Gaucher's disease, the deviation of metabolism may result in formation of varying amounts of these cerebrosides.[14]

The pathological changes observed are due to the distribution of Gaucher's cells throughout the lymphatic and hematopoietic systems. The organs chiefly involved are the spleen, liver, bone marrow and lymph nodes. Since reticulo-endothelial elements are present throughout the body in somewhat lesser amounts, it seems rational to find these cells in practically all organs which result in a variety of symptoms according to the part involved. A few of the reports in the literature describe Gaucher's disease of the lungs,[11] kidneys[9] and brain.[19] The spleen may be enlarged to tremendous proportions. In this part of the country, only Gaucher's disease, amyloidosis and leukemia give spleens of such magnitude. Occasionally, Gaucher's disease may occur in the absence of splenomegaly[12] which should not deter from the diagnosis. The organ is usually firm in consistency and the cut surface reveals white islands on a reddish background. These islands consist of an accumulation of Gaucher's cells. The Gaucher's cell is a distinctive large cell 20 to 80 microns in diameter. It may be round, oval, or spindle shaped with one or more eccentrically placed pyknotic nuclei (Fig. 1). The cytoplasm displays numerous fine fibrils more or less parallel to long axis of cell. This gives the cell the so-called tissue paper or spider web appearance. The liver shows small pale areas suggestive of leukemia. Nests of cells may be found in the bone marrow. For some unknown reason, the deep lymph nodes are more often found enlarged than the superficial ones.

Clinical

The clinical picture of infants is entirely different from that of the older age groups. The infant may appear normal at birth. Within a few weeks it develops splenomegaly, hepatomegaly, loss of weight, psychomotor changes, spastic paralysis and various other neurological manifestations such as trismus, spasticity, laryngospasm, strabismus, opisthotonos and apathy. An interesting case of this type was reported from Argentina. The child was born normally. Within a few days, it developed opisthotonos, convergent strabismus, trismus and retraction of lips, suggestive of spasmophilia. A sister of the patient died at the age of five months with opisthotonos and splenomegaly. All these cases of infantile Gaucher's disease with neurological symptoms die within a very short time.[7] Various theories have been propounded to account for the predominance of neurological manifestations. Some observers believe it is due to altered phagocytic ability of infants and possible diversion of materials needed for maturation of pyramidal cells to the reticulo-endothelial system. Others emphasize the developmental nature of the nervous system at this age and postulate that the enzyme systems are involved.

As previously stated, the disease occurs at any age and may be asymptomatic. Most commonly the patient notices either an increasingly large mass in the left side of the abdomen, with associated pressure symptoms or pressure of an enlarging liver. Frequently the patient has recurrent episodes of epistaxis, bleeding from gums, petechiae, purpura, post-traumatic and operative hemorrhage. This may or may not be associated with thrombocytopenia. Frequently the patient's main complaint is easy fatigability, weakness and other manifestations relative to the anemia which he has. Some patients' presenting complaint may be low back pain with sciatic radiation. This is due to bone involvement by Gaucher's cells. Bone involvement is a common finding and frequently the bone changes may be confused with tuberculosis.[16] Several cases have been operated with pre-operative diagnosis of tuberculosis. Result may be a sinus which can drain for years. Spontaneous fractures may be the first evidence of this disease entity.

On examination of the patient, splenomegaly and other findings aid in establishing a diagnosis. Lymphadenopathy may be present but frequently the nodes are too deep to be palpable. Pingueculae (wedge-shaped yellowish deposits) are frequently seen in the conjunctivae. About 50 per cent of the patients show a tan pigmentation especially of the face and circumoral line, though hands and legs may also be involved. Certain authorities emphasize pretibial yellowish pigmentation Malar flush and myopia may be present in this disease.[2] Cachexia may occur but seems more prevalent in the infantile type. Groen and Garrer find pul-

monary hypertension occurs frequently and one of their cases died apparently of chronic cor pulmonale. Autopsy was not performed but it may be postulated that Gaucher's cells had infiltrated the lungs.

The osseous lesions, as mentioned, may be misleading in differential diagnosis. In recent years much interest has centered around the various types of bone lesions. Risel[17] first noted macroscopic bone changes in Gaucher's disease and described the spongiosa of the femur as dotted with whitish spots which were accumulations of Gaucher's cells. Any bone may be involved but there is a predilection for the lower ends of the femurs. As a result of proliferation of Gaucher's cells in the medullary cavity, the cortex may be thinned irregularly. This expansion of the lower end of the medulla of femur with some accretion on the outside produces the so-called Erlenmeyer flask sign. The head of the femur is frequently involved and this may result in deformities. Other bones are involved with less frequency such as the humerus. tibia, radius, ulna, fibula, spine and ribs. Bone changes have been considered to be mostly of osteoporotic and destructive nature as a result of cerebrosidic reticulosis. Punched-out areas of bone and pathological fractures may occur as late manifestations. When destructive lesions of this type occur in the head of the femur, Legg-Perthes disease, tuberculosis and chronic osteomyelitis must be eliminated from the diagnosis. In differentiating tuberculosis of the spine, a distinguished point in Gaucher's disease does not involve intervertebral discs.

A few authors have stressed the proliferative nature of bone lesions in Gaucher's disease. Occasionally areas of increased density will be noted, especially in femoral heads and shafts of the long bones. One theory as to their causation states they are tissue products of reticuloendothelial proliferation developing as osseous metaplasia of reticular and collagenous fibers.[21] Others feel the infiltration of Gaucher's cells in and about the small arterioles and capillaries may be sufficient to cut off circulation and cause aseptic necrosis of bone[1] and thus cause sclerosis.

Hematologically there is no specific pattern in every case. Mild anemia is usually present except following hemorrhagic episodes. The anemia is most frequently described as normocytic without much evidence of blood regeneration in form of polychromatophilia or nucleated reds.[22] In the majority of cases there is a tendency toward increased red cell formation, as evidence by increased reticulocyte count. In some cases this could be explained as a reaction to blood loss. Various cases have been reported with microcytic anemias[18] and macrocytic normochromic anemias.[6] Leukopenia and relative lymphocytosis are common, but not essential findings. Often thrombocytopenia is an accompanying feature. Monocytosis has occasionally been described but is not common. Total fats, cholesterol and lecithin in the blood have been found to be within normal range. Subclinical icterus may be present with evidence of mild hemolytic anemia.

The differential diagnosis of Gaucher's disease is varied depending on the predominating signs and symptoms in each case. One must consider the multitudinous causes of hepatic and splenic enlargements associated with bleeding tendency; especially Banti's syndrome, hemolytic icterus, hypersplenism, cirrhosis and leukemias. When bone lesions predominate, osteomyelitis, tuberculosis, asceptic necrosis, multiple myeloma, Nieman-Picks disease, polyostotic fibrous dysplasia, hyperparathyroidism and Schiller-Christian's disease are to be considered. If considered, the diagnosis of Gaucher's disease may be made. Bone biopsy or puncture may aid. In the infantile type, the clinical differentiation from Nieman-Pick's disease may be difficult, as they both show neurological changes associated with hepatosplenomegaly. However, Nieman-Pick's is more often accompanied by hypotonia rather than hypertonia. It shows high blood cholesterol, absence of body pigmentation, frequent appearance of cherry red spot at macula, leukocytes which are vacuolated and presence of foam cells in bone marrow.

Our case demonstrates a number of previously discussed principles. It is valuable as it presents several interesting features and it has been studied over a period of fifteen years.

Case History

Mrs. H. N. first entered Harper Hospital in 1931 at the age of twenty-two. Her complaints were chiefly: giddiness, weakness and easy fatigability. The outstanding complaints in her past history were mild bleeding from gums, easy bruisability and frequent epistaxis since the age of ten. The patient had a left mastoidectomy, tonsillectomy and adenoidectomy at the age of two. At twelve the patient was watched for possible tuberculosis but was found negative. The

family history at that time was not especially informative except one brother had bleeding from gums and bruised easily. Catamenia was normal, periods having started at the age of fifteen and had been regular and not of

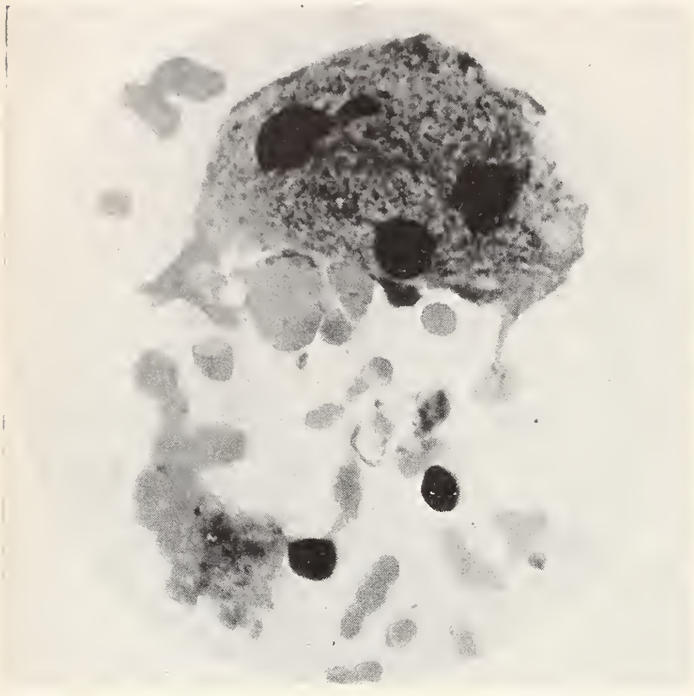

Fig. 1. Bone marrow smear showing giant bone marrow Gaucher's cell with three nuclei.

excessive nature. On first examination in 1931 the only positive physical findings were moderate diffusely enlarged thyroid which the patient had had since puberty and a slightly tender spleen palpable one finger breadth below the costal margin. Hemoglobin was 70 per cent at this examination. The patient did not return for further study and was not seen until December 7, 1932. At this time the patient was pregnant and the questions arose: (1) the effect of splenomegaly on her pregnancy; (2) if any blood dyscrasia was present; and (3) advice as to termination of pregnancy. Blood count showed RBC 3,200,000; WBC 6,900; PMN 85; L 12; M 3; anisocytosis and polychromatophilia were noted; platelets 140,000 with poor clot retraction. Icteric index 7, cell fragility normal. Anemia was corrected on iron therapy. Since the spleen was only slightly enlarged, no bleeding diathesis was manifested and repeated counts did not show any tendency toward anemia, treatment was mainly supportive and expectant. She was advised to continue her pregnancy. On June 23 the patient was delivered of a full-term male baby with aid of low forceps. No unusual difficulty was experienced in maintaining postpartum hemostasis. The infant's hemogram was normal on June 24 and has continued to be normal. On January 2, 1934, the patient's blood count revealed a recticulocytosis 8.3; C.I. .9; Hgb 80 per cent; RBC 4,100,000; WBC 3,650 with a mean cell diameter of 7.6 microns. Subsequent counts showed leukopenia, anemia, thrombopenia. In March, 1935, the patient returned for reevaluation. At this time the patient gave the additional history that five years preceding this admission the patient had had a tooth extraction followed by hemorrhage and bleeding which persisted for a week. The patient also complained of pain and pressure over the left abdomen which at times was moderately severe. Physical examination revealed triangular thickened yellow patches on nasal side of each sclera. Other

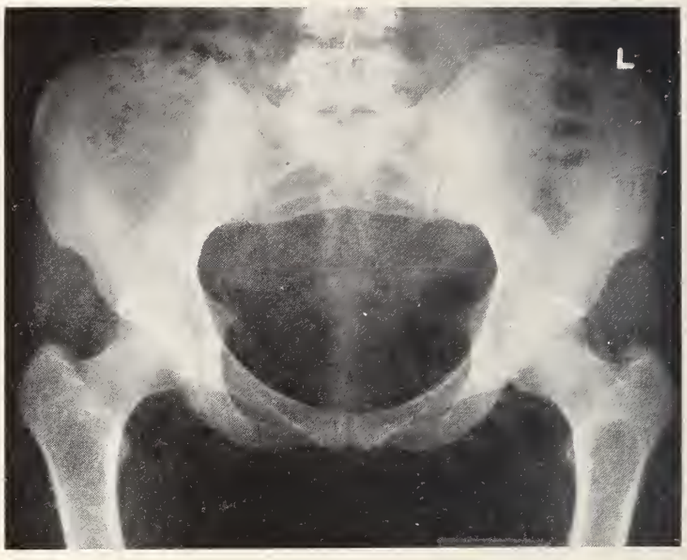

Fig. 2. Pelvis and heads of femurs showing invasion with Gaucher's cells.

positive physical findings were non-transmitted pulmonic systolic murmur, P 78, BP 120/60 and splenomegaly which occupied most of the left half of the abdomen. Thus, in one and one half years tremendous enlargement of the spleen had occurred. Numerous purpuric spots were noted on body and capillary fragility test was markedly positive. At this time, light brown pigmentation was noticed at mucocutaneous junction of upper lip and also over pretibial region. The patient stated the pigmentation, which had been present for a year, was worse during the spring. This has since persisted. Consultant hematologist found normal RBC, WBC and hemoglobin. He stated the RBCs were mostly round and deeply colored with many oval forms. Eighty-one per cent of the RBC were less than 7.5 microns. Reticulocytes were 3 per cent and platelets were markedly decreased. X-ray studies of skeletal system revealed normal skeleton except for minimal demineralization of the tibia.

At this study, congenital or acquired hemolytic icterus, thrombocytopenic purpura, Gaucher's disease and Banti's disease were considered as best diagnostic possibilities. At this time, it was learned that in addition to her brother, a nephew had bleeding tendencies as exemplified by bleeding gums; also an uncle had died in 1930 with an enlarged spleen. (Later, in 1948, a maternal aunt was shown at postmortem to have Gaucher's disease.) Sternal puncture showed typical Gaucher's cells previously described (Fig. 1). Because of mechanical difficulties and pressure symptoms of a large left-sided mass, bleeding diathesis, possibility of increase in hemorrhagic manifestations and relatively good condition of the patient, splenectomy was decided. Splenectomy was performed on April 1, 1935. The spleen, which was removed, weighed over 1650 grams. The spleen was weighed after a considerable amount of its blood was expelled. Platelets and WBC rose immediately following

surgery. Post-operative course was smooth. One week following the operation the patient developed consolidation of the left lower lobe. Platelet count, at this time, was over 700,000 and possibilities of pulmonary thrombosis and pneumonitis were considered. Type IV pneumococcus was found in the sputum. The patient recovered under supportive therapy. On November 7, 1937, the patient was readmitted for persistent uterine bleeding. Dilatation and curettage revealed eroded cervical polyp and symptomatology abated only to reoccur in two weeks with continued vaginal bleeding. Various measures were tried, including Antruitrin S, moccasin venom and blood transfusions, until bleeding stopped. At this time, the platelets were above normal and WBC was 19,200 with a normal differential. Urine was negative. Blood calcium was 10.7 mgm. per cent and blood phosphorus, 3.4 mgm. per cent.

On April, 1939, the patient was readmitted for hemorrhage following removal of the left upper third molar. Between bleeding episodes, blood showed RBC 3,040,000 with 70 per cent hemoglobin; WBC 27,000 with normal differential and normal platelets.

On April 13, 1949, she was readmitted because of one month's intermittent vaginal bleeding. Curettage revealed only a proliferative endometrium. While in the hospital, the patient had a molar removed with subsequent hemorrhage which required a week to control. Various measures, including oxycel packings and blood transfusions were used.

In November, 1949, the patient was readmitted because of profuse vaginal bleeding of three weeks' duration which had resisted all types of treatment. Protamine sulphate was given intravenously in total dosage of 450 mgm. This resulted in abrupt cessation of bleeding. Hemograms taken after recovery from this episode showed mild anemia and an otherwise normal count, except for leukocytosis in range of 15-20,000. Interesting finding at this time was blood cholesterol of 357 mgm. per cent.

Skeletal x-rays had not been taken since the splenectomy and were repeated in 1950. The following report is abstracted from that of Doctor V. C. Johnson:

Fig. 3. (*left*) Distal end of femur showing invasion of bone marrow.
Fig. 4. (*right*) Head of left humerus showing invasion of bone marrow.

(See Figs. 2, 3, 4) "Skull is normal as is the spine, scapula, ribs, forearms and hands. Medullary half of each humerus is definitely widened and has almost cystic appearance. Films of femurs show extensive generalized widening of the medullary shaft of each femur. Some circumscribed rarefactions are seen extending through cortical bone, particularly in the distal third of each femoral shaft. The tibial shafts show widening of the medullary cavity at expense of the cortical bone." In spite of these roentgen findings, this patient gave no complaints related to the osseous system.

Comment

The patient, in retrospect, presents a fairly typical course for Gaucher's disease. Prior to the splenectomy the patient presented a picture which we would now call hypersplenism with depression of the red count, white count and platelets. This was accompanied by various bleeding episodes. Following surgery, RBC, WBC and platelets rose to normal levels. This did not seem to affect the periodic bleeding episodes which continued to appear post-operatively for the past fifteen years. The patient has been subjected to various non-specific medicaments such as thyroid, liver, iron compounds and vitamins in an attempt to maintain the hemoglobin. In addition to vaginal hemorrhages, there have been other minor forms of bleeding tendency controlled locally.

The reports in the literature have favored splenectomy in Gaucher's disease although there have been many conflicting opinions. Davis[4] et al report a case of Gaucher's disease with splenomegaly, bruising, bleeding tendency and thrombopenia. Following splenectomy, platelets increased and bleeding diathesis ceased. Follow-up was one year. Similarly good results have been reported by Doan et al,[5] Mandelbaum et al,[10] and Capper et al.[3] Study was made by Muchsam[13] on forty-four splenectomized cases of Gaucher's disease. Nine died of the operation, three still had complaints, twelve were asymptomatic after one year follow-up, twelve were alive up to thirteen years post-operatively and were relatively asymptomatic, the remainder died at varying periods. Surgical techniques and antibiotics have improved since the time of his follow-up study. Some of the successful results have not had sufficient time to test their validity; others did well for long intervals following splenectomy. Our results were mildly successful. This might be due to accessory splenic tissue which remained in the body. However, during the operation the patient was carefully explored without finding any such tissue. We believe that if hemorrhagic episodes are frequent and a large spleen is mechanically quite annoying, splenectomy should be performed. Otherwise, knowing that splenectomy is not entirely an innocuous procedure, we recommend conservatism. It must always be remembered that Gaucher's disease is a chronic disease with long remissions and also frequently has a mild symptomatic course.

Control of the patient's last hemorrhage by use of protamine sulphate suggests interesting possibilities and speculations. Is there an excess of heparin or heparinoid substance circulating in Gaucher's disease which accounts for the bleeding tendencies? It is contemplated if the patient has any further bleeding episodes to check for hyperheparinemia. The patient was checked for presence of circulating anticoagulants at the last examination. Normal results were obtained. At the time of this study, the patient did not have any bleeding manifestations.

Summary

Gaucher's disease is discussed insofar as heredity, clinical, hematological findings and x-ray diagnosis are concerned. The case for splenectomy is briefly considered. A case of Gaucher's disease with familial Gaucher's disease is recounted. Efficacy of protamine sulphate in stopping hemorrhage in this case is reported. The possibility of anticoagulants in the blood is considered.

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MSMS

MICHIGAN HEALTH COUNCIL ACTIVE

(Continued from Page 770)

In collaboration with the American Medical Association, the Michigan Health Council will assist in the planning and staging of the National Conference on Health Councils to be held in Detroit next October.

Under the financial sponsorship of the Michigan Foundation for Medical and Health Education Inc., and co-sponsored by more than 50 Michigan health organizations (including the Michigan State Medical Society), the Michigan Health Council is laying plans for the fourth annual Michigan Rural Health Conference, to be held in East Lansing on October 20 and 21, 1950.

Benadryl in the Treatment of Parkinson's Syndrome

By Robert E. Yoss, M.D.
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THE TREATMENT of Parkinson's syndrome is far from satisfactory in the majority of cases. Numerous drugs have been used in the treatment of this syndrome with only moderate success. The more commonly used drugs are hyoscine, atropine, stramonium, hyoscyamine, amphetamine, and proprietory preparations containing the belladonna alkaloids in proportions found in Bulgarian belladonna root. Recently, Benadryl® (diphenamine),[5,16,23] parpanit (caramiphen),[10,26] and artane (trihexyphenidyl)[6,9] have been reported to be successful in the treatment of Parkinson's syndrome.

Because of the unsatisfactory medical treatment of Parkinson's syndrome, various surgical procedures have been used in the treatment of this condition in a few carefully selected cases. In general, surgical candidates must have a non-progressive, unilateral parkinsonism, of such severity that the patient is willing to trade a tremor for a severe paralysis. Bucy[4] estimates the group of Parkinson patients who can be helped surgically to be less than one in five hundred cases.

The site of surgical attack is at various levels. Klemme,[14,15] Bucy,[3,4] Meyers,[19,20] and others have reported numerous cases of parkinsonism treated by precentral cortical ablation, with only fair results. Meyers[19] has had encouraging results with pallidofugal section. Browder[2] has reported several cases of parkinsonism treated by section of the anterior limb of the internal capsule. Putnam[21,22] has a large series of cases in which a lateral pyramidotomy was performed in the cervical cord. Ebin[11] has done a more radical combined lateral and ventral pyramidotomy with some success. More recently Guiot and Pecker[13] have reported unilateral peduncular pyramidotomy. At the present time, surgical procedures must be regarded as not being applicable to the great majority of Parkinson patients and are still in the experimental stage.

Still another procedure has been reported by May and Adam.[18] They treated Parkinson patients with roentgen irradiation to the diencephalic centers with improvement in some cases.

The use of Benadryl in Parkinson's syndrome was first reported in 1947 by McGavack, Elias, and Boyd[16] who tried it on four arteriosclerotic Parkinson patients with subjective improvement in three cases and slight objective improvement in two of these cases. Budnitz[5] in June, 1948, reported eight cases of parkinsonism treated with Benadryl with considerable improvement in the symptoms noted in all cases. Ryan and Wood,[23] Corbin,[7] and Denker[8] have reported success in the use of Benadryl in parkinsonism. Mackay[17] found Benadryl of little value in Parkinson's syndrome. Corbin[6] believes Benadryl is occasionally the drug of preference in early cases of parkinsonism or in cases with minor symptoms.

The purpose of this paper is to evaluate further the use of Benadryl in the treatment of Parkinson's syndrome.

Eighteen patients with Parkinson's syndrome were selected and given Benadryl over various periods of time, depending on the effects of therapy. Four of the patients have taken Benadryl seventeen months or longer. The medication the patients had previously been receiving for the parkinsonism was not altered during the period of Benadryl therapy. The dosage of Benadryl was from 150 to 200 mg. daily, given in divided doses. This is the amount of Benadryl used and recommended by Budnitz, and Ryan and Wood.

The patients were carefully examined daily during the first two weeks of therapy and then examined periodically. Points carefully checked were the subjective report of the patient, neurologic examination, the performance in daily tasks, such as eating and dressing, the appearance and posture of the patient, the report of relatives, nurses, and other patients, the results from previous drug therapy, and handwriting.

An attempt was made to classify the cases into the major types of parkinsonism. Most of the post-encephalitic (chronic encephalitic) cases were obvious. Other cases were difficult to classify, especially cases of idiopathic paralysis agitans, since there is disagreement as to frequency[12,24] and even some question as to the existence of idiopathic paralysis agitans.[1] The importance of classifying parkinsonism into types when evaluating therapy is obvious when it is reported that cer-

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tain drugs are more effective in the encephalitic variety than in the degenerative variety.[12,27] Of the eighteen cases studied, twelve cases were post-encephalitic; three cases were arteriosclerotic; two cases were idiopathic paralysis agitans; and one case probably was on a luetic basis.

Results

There were two patients who received definite objective benefit from the Benadryl. There were four cases who showed either temporary or prolonged subjective improvement.

The case histories of the two successfully treated patients follow:

Case 1.—C. B., was a 49-year-old white man whose history included encephalitis in 1926. Onset of tremor at rest in the upper extremities was noted one year later. The tremor, along with muscular rigidity, gradually became more severe. The patient had a moderately severe alternating tremor of the upper extremities, sialorrhea, mask-like facies, rigidity of all extremities, a stooped posture, shuffling gait, and a monotonous tone to his voice. He had difficulty in feeding and dressing himself. Over a period of years, the patient had tried various drugs with no improvement in his symptoms. These included hyoscine, atropine, stramonium, rabellon, and, most recently, artane. Within twenty-four hours after Benadryl therapy was begun, during which time the patient received 200 mg. of the drug, he was able to walk better, could feed himself and dress more easily, and the intensity of the tremor was much diminished. On examination, there was less rigidity of the extremities. There was also some improvement in the handwriting. When Benadryl was discontinued, the patient noticed a return of severity of symptoms within a few hours. This patient has continued taking Benadryl for the past seventeen months and has continued to benefit from it.

Case 2.—E. S., was a 47-year-old white man with a history of encephalitis in 1920, followed three years later with the onset of alternating tremor and rigidity of the left upper extremity. The tremor and rigidity had become progressively worse. He had a constant tremor of the upper extremities, which was more severe on the left. He walked in a stooped position, but did not shuffle. He had moderate difficulty in eating and dressing, a mask-like facies, and a mild sialorrhea. The patient had been taking large amounts of atropine and hyoscine for many years with slight improvement. Improvement was noted twenty-four hours following beginning (200 mg.) of Benadryl therapy. The patient was able to use a spoon while eating for the first time in many years. There was definitely less tremor, a fact also noticed by relatives. No change in sialorrhea was noticed by the patient. On examination, there was less rigidity. When the patient was taken off Benadryl for three days, the tremor and rigidity became more severe. When artane was substituted for Benadryl, there was also an increase in the severity of the symptoms. This patient has continued to benefit from the Benadryl after seventeen months of treatment.

Of the remaining sixteen cases, three patients reported definite subjective improvement. However, this improvement was difficult to evaluate objectively and the improvement was temporary in one case. One of these patients has continued to take Benadryl because of the subjective improvement. In addition, there was definite diminution in the frequency of oculogyric crises in one post-encephalitic patient following Benadryl therapy, but there was no improvement in the parkinsonian symptoms.

It appears that Benadryl has a place in the therapy of the parkinsonian syndrome. Benadryl may best be tried following unsuccessful use of the more commonly used drugs.

Summary

1. A report of eighteen cases of parkinsonism treated with Benadryl is presented. Twelve cases were post-encephalitic; three cases were arteriosclerotic; two cases were idiopathic paralysis agitans; and one case probably was luetic in etiology.

2. Objective improvement was noted in only two cases, both belonging to the post-encephalitic group. Case histories are given for these two cases. Slight or temporary improvement was noted in three cases, all belonging to the post-encephalitic group. Diminution in the frequency of oculogyric crises was observed in one case of post-encephalitis.

3. Benadryl may be of value in cases of parkinsonism which do not respond to the usual drug therapy.

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Potassium in Electrolyte Balance

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IN THE past two or three decades there has been an increasing knowledge of the importance of maintaining proper fluid and electrolyte balances for any living organism. In the past few years it has become apparent that under certain conditions in the human body the replacement of the common ions found in the plasma was not sufficient. It has long been known that about 70 per cent of the body weight is water, which has generally been considered to be divided into two main compartments separated by the cell membrane. About 20 per cent of the body weight is considered to be extracellular fluid which may be further separated into the intravascular plasma and the extravascular protein-free interstitial fluid. The primary cations in the extracellular compartment are sodium, potassium, calcium and magnesium. The anions are primarily chloride, bicarbonate, and small amounts of phosphates, sulfates, proteins and organic acids. Manipulation of the sodium, chloride and bicarbonate ions to vary the blood volume or maintain acid-base balance has been common for years. Likewise, the administration of other ions and solutions for caloric needs has been increasing in general use.

The other major fluid compartment of the human body is contained within the body cells and makes up about 50 per cent of the body weight. This great mass of the body is controlled by the cations magnesium and especially potassium and the anions bicarbonate, organic phosphates, sulfates and proteins. In the past few years we have learned that the rigid segregation of these ions by an impermeable cell membrane does not exist. We know that under certain conditions intracellular electrolytes must traverse the cell membrane and the same is true of some of the extracellular ions. We know that under certain conditions potassium concentrations will vary, often with very striking clinical manifestations. This is to be expected since potassium is the primary cation controlling such a major part of the body mass and also since it is so intimately related to the proper functioning of each individual cell.

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Potassium Metabolism

Normally, the daily potassium intake and excretion is 75-100 m.eq.[3] Almost all of the potassium is excreted in the urine and feces with less than 20 per cent being found in the stools. In the fasting state[8] or on a potassium-free diet[22] the daily excretion is maintained at 25-75 m.eq. These findings indicate that the human body is not capable of retaining potassium even in the presence of a marked negative potassium balance. The clinical application of this fact is immediately obvious and we therefore know that whenever there is no potassium intake a potassium deficit is present. There is also considerable evidence which indicates administration of sodium salts will accentuate a potassium deficit.[7,16] Again the clinical application of this combination of circumstances of no potassium intake combined with maintenance or excessive sodium intake is immediately apparent when we recognize the correlation with the usual parenteral fluid routine, especially in postoperative conditions. Fortunately, such circumstances do not usually last for any great length of time so that we do not often see marked clinical potassium deficiency.

Clinical evidence of the importance of potassium in body metabolism has been accumulating for some time. In the attacks of familial periodic paralysis there is a lowered serum potassium[1,12] and the attacks may be relieved by administering potassium salts. Holler[15] in 1946 described the first recognized case of hypopotassemia in a patient recovering from diabetic acidosis. Additional reports have appeared since then describing a low serum potassium concentration in patients recovering from diabetic acidosis,[10,23] and also in postoperative states,[16,20] infantile diarrheas,[13] alkalosis,[2] nephritis,[4] and following excessive administration of desoxycorticosterone.[6] It seems apparent in reviewing these reports that in most cases, except possibly in familial periodic paralysis, a low serum potassium means a low total body potassium. However, it is also important to realize that the total body potassium and the intracellular potassium may be depleted and yet the serum potassium levels be within normal limits.

Hypopotassemia

Occurrence.—We may find clinical evidence of potassium deficiency whenever there has been prolonged deprivation. This is true because, as previously stated, there is a continued potassium excretion except in some cases of renal failure when potassium excretion may also fail. Whenever there is an inadequate potassium intake the body develops an increasing potassium deficit. Over a period of time this deficit can become serious, particularly in certain postoperative states and especially if there is a further depletion of body ions through suction drainage, draining sinuses, et cetera. As an example, a postoperative patient who had been hospitalized for a perforated ulcer was studied recently. This patient had had a generalized peritonitis and had been adequately treated postoperatively with the usual parenteral fluids, Levine suction, antibiotics, et cetera. Four days postoperatively he was started on oral nourishment which had to be discontinued after two days because of obstructive symptoms associated with a severe generalized penicillin reaction with angioneurotic edema and urticaria. He was therefore continued on parenteral fluids and several days later almost expired with a serum potassium level down to 5 mg./100 c.c. (1.2 m.eq./liter), even though there was no acidosis, alkalosis or dehydration present. In addition to the urinary loss of potassium there is a loss of potassium ions in gastric and intestinal secretions.

In the presence of any dehydrating condition there is a loss of intracellular fluid as well as extracellular. Usually there is first a depletion of plasma fluid and electrolyte, which in turn is made up from the extravascular interstitial fluid. When necessary the body also calls on the still larger stores of fluid within the intracellular compartment and we find potassium leaving the cell[5,11] in order to permit the intracellular fluid to be utilized. Under these circumstances there may be a temporary increase in the concentration of potassium in the interstitial and plasma fluid and some of this potassium is excreted which depletes the total body potassium. If fluid without potassium ions is then administered there is a rehydration which causes a relative dilution of the serum potassium. In addition when sodium is made available to the extracellular fluid, the cells themselves will take up some of the extracellular potassium for their own rehydration. This combination of extracellular dilution and cellular reabsorption may be sufficient to cause clinical hypopotassemia. Acute diarrheas and other gastrointestinal disturbances especially in infants who have a small body mass are an excellent example of dehydration and potassium deficiency.

In diabetic acidosis there are the same factors present as in any severe dehydration. With treatment there is the same process of rehydration with dilution of available stores of potassium in the extracellular compartment and cellular reabsorption of potassium. In addition the large amounts of fluid administered act to increase total renal excretion of potassium. Finally large doses of insulin cause a further reduction in extracellular potassium by increasing deposition of glycogen in the liver and muscles, a process in which potassium and phosphorus are utilized. Some observers[21] feel that clinical potassium deficiency in diabetic acidosis rarely occurs, except when intravenous glucose has been administered in the first six to eight hours of therapy; however the physiological changes involved must invariably be associated with potassium depletion. Probably most of the unexplained deaths after diabetic acidosis when the ketosis has been relieved and hypoglycemia is not present have been due to potassium deficiency.

In some cases of chronic nephritis[4] the appearance of hypopotassemia has been reported and is apparently due to an excessive loss of potassium in the urine. Also in certain chronic diarrheas,[19] such as sprue, a patient may develop a potassium deficiency as a result of defective absorption and a long-sustained negative potassium balance. The administration of excess desoxycorticosterone has also been associated with clinical potassium deficiency.[6] Similarly potassium deficiency has been reported in Cushing's syndrome with adrenal cortical tumors.[19]

Clinical Findings.—The clinical recognition of potassium deficiency depends first on a knowledge of the circumstances during which it may develop. The rather general complaints of loss of strength and energy and a listless, apathetic attitude are the early manifestations and are certainly nonspecific. In more advanced potassium deficiency there is an increasing weakness of the extremities which may merge into a flaccid paralysis and the development of weakness of the respiratory muscles.

Only in very severe cases are sensory manifestations and cranial nerve abnormalities present. When respiratory paralysis is imminent the respirations are rapid and shallow with very little movement of the chest wall and diaphragm and obvious use of accessory respiratory muscles.

Electrocardiographic Changes.—The electrocardiographic changes associated with abnormalities of the serum potassium concentration are quite characteristic. In decreasing serum potassium levels the changes are as follows: first, a prolongation of the Q-T interval, in which there is a low broad T wave whereas in hypocalcemia the prolonged Q-T is due to a lengthened ST and a normal T wave; secondly, there is a lowering, flattening or inversion of the T waves; in the third stage there is a sagging on the ST segments and finally a marked depression of the ST origin with a slow rise to a low late T wave. This last stage is seen with serum potassium levels of 1.5 m.eq. or lower.[16]

Finally, the diagnosis of hypopotassemia is proven by the serum potassium levels which normally vary from 4 to 5 m.eq. and in clinical deficiencies may go below 1 m.eq.

Hyperpotassemia

Occurrence.—Increases in the serum potassium level may be found in excessive intake but are very unlikely if renal function is unimpaired. In some cases of severe renal impairment[9] potassium excretion may also be faulty with retention and abnormal potassium levels. Rapid increase in serum potassium concentration during intravenous therapy with potassium salts may occur and a death has been reported under these circumstances.[16]

Electrocardiogram.—When the serum potassium level rises above normal the electrocardiographic changes are equally prominent.[17] First, there is an increase in the amplitude of the T waves, followed by a decrease in the the amplitude of the R waves with an increase in the amplitude of the S waves. Later, the P waves disappear and the QRS complexes widen with depression of the ST segments. Finally, cardiac arrest occurs.

Clinical Findings.—It is interesting that the clinical signs of excessive serum potassium levels are similar to those of deficiency. Paresthesias of the extremities[18] are followed by weakness and flaccid paralysis. The serum level at which these changes occur is not definitely known, but from the reported cases[9] must be around 10 to 12 m.eq. A case of an infant surviving a serum potassium level of 12.3 m.eq. has been reported.[14]

Potassium Therapy

The administration of potassium is advisable whenever a negative potassium balance or clinical deficiency is present. As much as 35 gm. of potassium chloride have been injected into a patient in an 18-hour period.[16] Generally from 2 to 4 gm. of potassium chloride are effective in relieving the acute manifestation of deficiency. On occasions where the deficiency is marked or has been prolonged larger amounts may be necessary. It has been suggested[16] that the serum reaching the heart should not exceed the concentration of 7 m.eq. of potassium per liter. Consequently one should not infuse solutions containing 2 to 4 gm. potassium chloride per liter at a rate faster than 8 to 12 c.c./min. Great care is advisable in administering potassium salts to individuals with impaired renal function and especially with low renal output. Except in emergency or when otherwise necessary oral potassium salts may be given in 0.5 to 2.0 gm. doses as often as necessary to accomplish the desired result. The use of potassium and phosphate combined[21] especially in diabetic acidosis seems very logical. Patients able to take an average diet do not need potassium salts unless they have to make up a marked potassium deficit.

Summary

The potassium ion is the chief intracellular cation and thus is a primary electrolyte in regulating the fluid in the intracellular fluid compartment which normally makes up half the body weight. The clinical signs of hypopotassemia are loss of strength and energy, increasing muscular weakness, flaccid paralysis of the extremities and finally respiratory paralysis with death.

Potassium deficiency occurs whenever there has been prolonged deprivation. This occurs because potassium excretion is maintained even on an inadequate intake which indicates that the body has no efficient mechanism for retaining potassium ions. Realization of this is particularly important in postoperative states. Potassium deficiency occurs following severe dehydration due to the mi-

gration of potassium out of the cell in order to make intracellular fluid available to the body. When fluids without potassium are administered this causes a relative dilution of the extracellular potassium stores and also the cellular reabsorption of extracellular potassium increases hypopotassemia. The same mechanism occurs in treatment of diabetic acidosis and is further aggravated by the utilization of potassium in the increased formation of glycogen which insulin with glucose bring about. Potassium deficiency may also occur in chronic nephritis, conditions of defective absorption, presence of excessive desoxycorticosterone and in familial periodic paralysis.

The diagnosis of potassium deficiency depends on a knowledge of how it may develop, the clinical findings, the electrocardiographic changes, and the serum potassium levels. Potassium deficiency is readily overcome by the administration of potassium salts.

Hyperpotassemia is found when potassium excretion is impaired or in the too rapid intravenous administration of potassium salts. It is characterized by paresthesias of the extremities, weakness and flaccid paralysis and may closely simulate clinical potassium deficiency. The electrocardiogram is valuable in immediately diagnosing either condition.

Conclusion

Potassium deficiency of varying degrees is undoubtedly much more common than is being generally recognized at the present time and potassium salts should be added to our common parenteral fluids therapy.

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JMSMS

"TO YOUR HEALTH"

A new film to inform the public of the accomplishments of the medical profession and point out the problems of socialized medicine, entitled "To Your Health," has been produced for the Michigan State Medical Society by the Jam Handy Organization. The film briefly summarizes and effectively treats a widely discussed national issue that affects the lives and well-being of every American.

Phil Faversham, son of the late matinee idol William Faversham, heads an outstanding cast illustrating the viewpoints of people on the subject of compulsory health insurance. A reporter is sent out by his city editor to do a feature on the controversial issue of socialized medicine. He talks with the man on the street, the housewife, the worker—all who would be affected by this proposed government program.

He interviews a doctor who cites the record of the medical profession in helping reduce infant mortality, increasing life expectancy, controlling children's diseases, et cetera. The doctor states that more hospitals are being built, more doctors are available, more health information is being distributed, and urges people to take better care of themselves and voluntarily set up a reserve fund against ill health.

Growth of voluntary medical health funds is shown, proving that people can solve their own problems without government support. The picture goes on to point up that Federal control of medical care would make physicians servants of the state and might cause a breakdown in the present high state of efficiency among our professional men who would be under government control which is lacking in knowledge of medicine.

Finally the government is urged to help by solving some of the causes of diseases, that is, slum clearance, better working and home conditions, et cetera.

The film has had many effective showings in theaters in the South, East and Midwest.

Paralysis of Distal Jejunal Loop after Partial Gastrectomy

An Unusual Complication of Gastrectomy

By Charles S. Kennedy, M.D., F.A.C.S., Roland P. Reynolds, M.D., F.A.C.S., and Meyer O. Cantor, M.D., F.A.C.S.
Detroit, Michigan

A FAILURE of the stomach to empty is an extremely serious complication following partial gastric resection. The most common cause for this has been known for some years to be an edema at the true gastric stoma. As a result the stomach cannot empty via the greatly narrowed opening of the distal jejunal loop which constitutes the true gastric stoma.[1] In the past five years, we have had three cases in which this failure on the part of the stomach to empty was not due to a stomal edema with a mechanical occlusion at the gastric stoma, but rather to a paralysis of the distal jejunal loop. This complication is very uncommon but nonetheless extremely important since the treatment depends upon recognizing its probable presence.

The postoperative low-protein edema which so commonly causes obstruction at the true gastric stoma readily responds to appropriate treatment. When the stomach is kept empty by aspiration and the plasma protein level is restored to normal, such cases invariably respond with a diminution of the stomal edema with the result that the obstruction disappears. This may take as long as twenty-three days.

A second type of postoperative gastric retention which clinically cannot be distinguished from the stomal edema without a period of observation is a paralysis of the distal jejunal loop. In a series of 418 gastrectomized patients, three such cases have been noted. This is an incidence of 0.7 per cent for this complication. When this occurs it is far more serious than the stomal edema previously described. Strangely enough, the surgical literature is singularly silent with regard to this complication, although surgeons appear to be cognizant of its existence. In these cases, when reoperated upon, all died. In the three cases the subject of this paper, all were reoperated upon with the mistaken diagnosis of mechanical obstruction at the gastric stoma, and all three patients died.

In this condition, it is probable that the operation of gastrectomy altered the nerve supply so that the remaining portion of the stomach and distal jejunal loop became atonic. As a result, there was a persistent failure of the stomach to empty. Vomiting was profuse and continuous in all cases.

The three cases in which this distressing and uniformly fatal complication occurred were not the work of one surgeon. Three different surgeons, each having one case, make up this small group of patients. The clinical picture, operative findings, and final result were the same in all cases.

Case Reports

Case 1.—H. Mc I., a fifty-five-year-old white man, was admitted to the hospital on April 1, 1943, with a diagnosis of gastric ulcer. Onset of symptoms one year previously with nausea, vomiting and epigastric distress. At that time, a gastrointestinal series showed a definite ulcer. On April 12, 1943, his abdomen was opened and a large ulcer was found in the upper part of the duodenum. Due to the marked infiltration it was considered to be unwise to resect the ulcer. An exclusion type of gastric resection was done with a Polya anterior gastrojejunostomy.

Following the operation, a gastric retention was noted. Vomiting was almost continuous. The plasma protein level was normal. On April 24, 1943, twelve days postoperative, a diagnosis of obstruction at the gastric stoma was made and reoperation decided upon. His abdomen was opened. The anastomotic stoma was found to be of good size and placed in a dependent position. It was patent. The distal jejunal loop appeared atonic and dilated. An entero-enterostomy was done connecting the proximal and distal jejunal loops below the gastrojejunostomy stoma.

Following the second operation, the patient's condition became progressively worse, and he expired on May 9, 1943.

At autopsy a perforation 4mm. in diameter was found in the duodenum at the site of the ulcer.

Comment.—At reoperation twelve days after a partial gastrectomy, an anatomically normal gastrojejunostomy stoma was found. The gastric contents did not evacuate from the stomach because of atony of the distal jejunal loop and the remaining portion of the stomach. An entero-enterostomy between the two loops of jejunum was unsuccessful in preventing intestinal stasis. This case appears to be one in which the gastric stoma although anatomically good was physiologically poor because of the jejunal atony.

From Grace Hospital, Detroit, Michigan.

Case 2.—L. L., a sixty-two-year-old white man, was admitted to the hospital on November 16, 1945, with a diagnosis of an obstructing duodenal ulcer. The onset of symptoms was approximately sixteen years ago. Hemorrhage on two occasions. On December 1, 1945, his abdomen was opened. A duodenal ulcer three-fourths of an inch beyond the pyloric ring was found to be causing a high grade obstruction. The ulcer was buried in the pancreas. Two thirds of the stomach was resected. The duodenum was divided just beyond the pyloric ring above the ulcer. The ulcer itself was not removed. An anti-colic gastrojejunostomy of the Polya type was done. A Penrose drain was placed down to the duodenal closure and brought out through a stab wound in the right flank.

Following the operation, the patient began to vomit. This was continuous. Red blood count was 4,440,000 with 90 per cent hemoglobin. Whole blood chlorides 400. Serum albumin 3.7, and serum globulin 2.0. Because of the progressive deterioration of this patient despite gastric lavage and normal protein levels, reoperation was decided upon.

On December 23, 1945, his abdomen was reopened. No evidence of peritonitis was found. All loops of bowel were collapsed. Examination of the anastomosis between the stomach and jejunum showed normal anatomy of the stoma which was of good size. There was no stenosis of the stoma. An entero-enterostomy was done between the two segments of jejunum. A large mushroom catheter was introduced into the distal loop of jejunum about two feet beyond the entero-enterostomy by the Witzel technique.

The patient expired on December 24, 1945.

Comment.—Here again we find at reoperation an anatomically normal gastrojejunostomy stoma which was not obstructed although the patient presented all the clinical features of an obstruction at the gastric stoma. At reoperation an entero-enterostomy was the operative procedure. The result: death.

Case 3.—J. C. W., a fifty-four-year-old man, was admitted to the hospital on August 11, 1943, with a diagnosis of gastric hemorrhage. He was known to have had a duodenal ulcer for seven years. Two years ago he had a perforated ulcer which was closed. He remained well for three months after this and then had a recurrence of symptoms. One week prior to admission, he noted tarry stools.

On August 27, 1943, his abdomen was opened. A large perforated duodenal ulcer was found at the junction of the first and second portions of the duodenum. The perforation was one centimeter in diameter. It was impossible to carry the dissection distal to the ulcer because of the marked induration and edema. An exclusion type of operation was considered to be the safest procedure. The duodenum just above the ulcer was doubly clamped and cut. The duodenal stump was then inverted in five layers against the perforated posterior wall ulcer. Two thirds of the stomach was removed. A Polya type of anterior gastrojejunostomy was done.

The patient began to vomit after the operation. Vomiting was continuous. No distention. He was unable to retain food. Blood count normal and the serum albumin was 3.2 with the serum globulin 2.4. A diagnosis of stomal obstruction was made and reoperation decided upon.

On September 11, 1943, his abdomen was reopened. The omentum covering the gastrojejunostomy was carefully separated from the underlying structures. The anastomosis was found to be in good condition with no leakage and with an adequate opening into the distal jejunal loop. There was no evidence of stomal obstruction. Because it was difficult to pass the long tube through the stoma at this time a Miller-Abbott tube was passed into the distal jejunal loop through a gastrostomy opening.

The patient expired twenty-four hours after the second operation.

Comment.—Persistent vomiting followed a partial gastrectomy. A mistaken diagnosis of obstruction at the gastric stoma was made. Reoperation decided upon fifteen days postoperative. At reoperation, the stoma was found to be anatomically perfect. Atony of the distal jejunal loop was noted. A long tube was passed through a gastrostomy opening into the distal jejunal loop. The patient died the next day.

Summary

Three patients in whom a gastric resection had been done are presented. They all show the same clinical picture: an exclusion type of gastric resection without removal of the ulcer; persistent vomiting occurred postoperative in all cases; normal values for plasma proteins. At reoperation an anatomically normal gastrojejunostomy stoma was found in each case, but the stoma was not functionally good. Atony of the distal jejunal loop was noted in each case. All three of these patients died.

These patients at reoperation were all proven to have no mechanical obstruction at the gastric stoma. The presence of an atonic distal jejunal loop was the only disturbance found. It is probable that the gastric retention was neurogenic in origin. Two probable mechanisms for this suggest themselves. On the one hand, the dissection of the stomach may have cut the nerve supply to the distal jejunal loop. If this is the mechanism, it is surprising that such cases do not occur more often. The second possibility is the question of a small leak at the site of the ulcer. In the performance of the exclusion type of operation the ulcer is not removed. A small perforation well buried in the pancreas may result in a reflex atony of the distal jejunal loop or the entire duodenum and jejunum including the stoma.

Conclusions

1. In patients in whom persistent postoperative vomiting occurs, atony of the distal jejunal loop should be suspected if the plasma protein level is normal.
2. Such patients should not be reoperated upon.

(Continued on Page 877)

Emotional Attitudes of Infants

By Benjamin B. Stamell, M.D.

Detroit, Michigan

*"It takes a lot of hard work to produce a neurotic or delinquent child."**

THE KEYSTONE to this democracy is the freedom it offers the individual. The freedom of movement, the freedom of desire, and the freedom to make decisions are all part of the scene that the mature American cherishes. Yet, strangely, while these rights have become prerogatives of the adult, they are sharply limited where children are concerned.

If adults were subjected to the same rigorous routines that children face every day, they would tolerate that situation for only a short while, and it would not be long before these adults became violent dissenters. For an example, when an adult becomes hungry, he heads for the refrigerator for his necessary sustenance—but what is done with children? The clock is watched until it indicates the time that the mother thinks the baby is hungry (the fact that he has been irritable and disturbed for an hour or so before and has been yelling quite vociferously is disregarded), and then the child is fed. The converse is also true. Adults reserve the privilege of refusing food when they lack appetite; but should an infant refuse its milk, then the mother resorts to all sorts of strategems to make the infant eat—even to the point of pouring milk down the child's throat.

Similarly, when an adult feels the call of nature, he has the privilege of going to the toilet and relieving himself at the time he chooses. But what frequently is attempted with the infant? Again, the impatient parent resorts to various strategies and attempts to get the infant to relieve himself at the time which the parent chooses. How proud is the mother who has her infant trained at nine months!

Again, adults feeling particularly energetic reserve the right to choose the time they go to bed, varying the hour in which they do so to as great a span as three or four hours. With an infant or child, however, when the hour hand indicates 7:00 or 8:00 o'clock, as the case may be, the mother insists that the infant be in bed, again paying no attention to the fact that he is bright, alert, and rested from the nap he has had only three hours before, and insisting that he wants to stay up. The child is disrespected completely psychologically and physiologically, and is put to bed.

These items of over-control and arbitrary training by the parents can best be illustrated by a case.

Tommy Jones was referred to the Children's Center because he was frequently difficult to manage; he sucked his thumb; his mother thought him obstinate and defiant; he was brutal to his little sister; he was an eating problem; he was very nervous and high-strung, and had repeatedly said that he hated his "mommy" and he hated his "daddy."

Tommy was quite responsive when he appeared at the Center with his mother. He was an attractive-looking youngster and was immediately absorbed with the playroom. He separated readily from his mother and was soon preoccupied with toys and playthings. His mother, an exceedingly pale and nervous woman, then offered this history:

She said that anything she asks Tommy to do means a battle with him, even if it is something that is as minor as getting his face washed or going to sleep. She remarked that she had difficulty with him from just about the time she brought him home from the hospital. When Tommy was only a few weeks old, she had to call in a neighbor woman to help give him his bath because, she said, "He was struggling against me."

Tommy cried a great deal during the first two months of his life. Mrs. Jones said it was impossible for her to bear his crying; so when he was two and a half months old, she put him in a hospital for observation for a period of one week. When he came out of the hospital, he was not crying, and Mrs. Jones was informed that he did not cry while he was in the hospital—but he began again a short time after he had been home. At that time, Mr. Jones moved everything into his room, so it would not be necessary to disturb him or to carry him around too much. The little stove on which his bottle was warmed, his bassinette, and everything pertaining to his comforts was moved into his own little room.

Mrs. Jones said she was very strict with his schedule, making him wait for his food even though he cried terribly for it. She said, with some show of insight, that this may have been one of the causes of the fact that when he was seven months old, he almost completely stopped eating. Another feeding problem was created when he was weaned from the bottle at the time his little sister was born. It

*From a remark by Dr. Fritz Redl.

was only after several months had passed that he agreed to take any milk at all. Mrs. Jones said that whenever Tommy saw her feeding his baby sister, later on, he would throw up in his playpen. She thought he did this purposely and, consequently, spooned up the vomitus and made him eat it again. She believed that this cured him of that habit.

As Mrs. Jones related this incident, she said, "I am really a nervous wreck; I am always battling with him. I feel I have to get him out of the house before something serious happens." She said she cries quite a bit, and, on such occasions, Tommy would say, "I like to make you cry because you treat me so bad." Last year Mrs. Jones put Tommy in a nursery school. At that time, he would not allow her to touch him when she came to take him home. The nursery teacher always had to put his hat and coat on for him.

Tommy was placed on the breast when he was born. Mrs. Jones stated that she had to stop after one month because she thought herself much too nervous. He vomited quite frequently while on the breast, and this disturbed her very much. He took to his thumb when she took him off the breast. According to Mrs. Jones, he only sucked his thumb when he was upset or when he was sleeping. She did not approve of this thumb-sucking. She used medication, mittens and thumb-guards to prevent it. None of them worked, and he still sucks his thumb.

Mrs. Jones said she began toilet training him when he was six months old. Frequently she would scold him, and occasionally she spanked him when he soiled. When he was eleven months old, he was, according to Mrs. Jones, "housebroken." However, when he was two and a half, he began to wet again. This continued until about six weeks prior to his admission to the Children's Center. Mrs. Jones said, "I worked hard at it, but that seemed to make him worse.

* * *

Recently there has been a growing tendency to discard the rigidity of feeding schedules which in the past had probably done considerable harm in encouraging mothers to become tense and arbitrary. Under the guidance of the Cornelian Corner, pediatricians, at the present time, are recommending that the baby be fed when he is hungry, irrespective of the hour. This is the "self-demand schedule." Surprisingly enough, after a period of being maintained on this schedule, many children are found to work themselves onto a fairly regular schedule in a short time. Self-regulation appears to be of definite value in maintaining the mother's self-confidence and in giving her a relaxed attitude toward her child.

Generally, feeding problems are commonest during the first year. Some problems, as in the case of Tommy, are started in the first weeks of life if the formula prescribed proved to be too large, or if the mother is encouraged to be arbitrary. The baby who, every time he falls asleep satisfied, gets the soles of his feet snapped, and the nipple shaken vigorously in his mouth begins to lose his enthusiasm for food and to become balky and irritable. If the resistance to feeding becomes established, it may last for years and have a harrowing effect on the personalities of the child and of the mother.

A common time for feeding rebellion occurs when solid foods are first introduced. A great number of infants, despite their eagerness for calories, are first inclined to be somewhat doubtful about the first solid food. The taste, the spoon, the consistency, the method of swallowing are all new. Most of these skeptics decide, after a few days, that the substance is at least nutritious, and they gradually develop more enthusiasm. Some of them, however, become increasingly intolerant as the days go by; and if the struggle is kept up, a mother might find that at the end of ten days, the baby is beginning to refuse the bottle too.

Forced weaning for which the baby is not ready is frequently a cause for disturbance. There is a definite danger in too early weaning. Some bottle-fed babies show a readiness for gradual weaning to the cup in a period of between eight and twelve months of age. They become less eager for the bottle; they stop and play with the nipple, and they take milk readily from the cup. On the other hand, an appreciable number, even though they have taken willingly a little milk from the cup from as far back as five months of age, will, as they begin to be about nine months old, push the cup away suspiciously or let all the milk run down the sides of their chin. It is apparent that a certain shrewdness comes on at this stage of development and makes children suspect and fear that the bottle is about to be taken away. This frequently occurs in babies who are generally devoted to the bottle. Forced deprivation of the bottle at such a phase is likely to produce a refusal to take any milk from the cup, unhappy behavior for days, and sometimes a complete hunger strike.

The second year brings pronounced changes in an infant's personality and behavior and calls on

the mother for an entirely new resourcefulness and adaptability. She has now become accustomed, during the first year, to his automatic co-operation. If she offered a teaspoon of spinach, he opened his mouth just as eagerly as if she offered applesauce. Even though he liked it less, he was too hungry to quibble. If it was convenient for her to have him in the playpen, she could put him there, toss him a couple of familiar toys, and know that he would play happily. But just about the time he is one year old, he begins to walk and acquire some independence and with it a charge of energy that keeps him going all day. He explores constantly. He will be in every closet in the house. He will play with the books in the bookcase. He will climb on all the tables. He will pull at all the lamp cords. He will take many tumbles before he learns any respect for suggestions his mother might make.

At this time, his ego is definitely taking shape. He senses that he is a separate person entitled to his own wishes, and a will of his own. He early learns to say "no!" and uses it on all occasions, even in response to suggestions that appeal to him. He has learned no respect for authority, and when told, "No, no, no," from across the room, he is more likely to persist than to desist. It seems as though he has a compulsive need at that time to exercise his willpower for its own sake.

As he becomes more insistent on his independence from his mother, he at the same time becomes aware of his dependence. He may cry each time she leaves him alone. He may insist on being held. If he is allowed the freedom of exploring the house, he scrambles back to her at regular intervals for reassurance. In the doctor's office, where at one time he was only mildly concerned with what went on, or he whimpered a little, he now jumps to his feet, yelling, and tries to climb off the table and into his mother's arms. He is now likely to be frightened by noisy, moving objects, like vacuum cleaners. Undoubtedly this is part of his total pattern of emotional development, and while he has the ability and the desire to explore away from his mother, he also has the instinct to hurry back to her noisily when he meets some strange and potentially dangerous enemy.

A number of babies at the age of a year show the same exaggerated arbitrariness in appetite that they show in other matters. Possibly, the smaller rate in gain of weight and the discomfort in teething play a part in the sudden decreases in appetite which occur. But, over and above these, he shows an irritating choosiness. He refuses to touch the vegetables which were his favorite yesterday. He may turn against all his vegetables for weeks or even months at a time, or against cereal and his milk. The conscientious mother, sure of the importance of a balanced diet, becomes bossy and insistent. The child's temporary dislikes for certain foods are turned into permanent hates which often last for years. Certainly more feeding problems begin during the second year than during any other period. The irritation of the frustrated mother and the balkiness of the child can easily spread to other aspects of their relationship.

Toilet training, too, has an important influence upon the emotional development of the infant. A too rigorous or too early training leaves an impression which carries over into adult behavior. However, the earliness with which training efforts are begun is much less important than the reaction of the child and the attitude of the mother during the precarious second year. He is generally opinionated and touchy. He becomes increasingly aware of his bowel function and takes a possessive and proprietary attitude towards it. He enjoys playing with his feces and smearing, and will frequently present his parents with a handful of fecal material.

If the mother is intolerant of such conduct, it is easy to see why she rubs the child the wrong way. Quite obviously the child has not yet been indoctrinated with the niceties of social behavior. Actually, few revolts occur in babies whose movements are naturally regular. They have their movements on the seat right after breakfast before they have a chance to become impatient. It is the child who is naturally irregular, whose mother has attempted to put him on too often and to insist that he stays on too long, that is the problem. The babies who are most prone to develop resistance are those who have experienced painfully hard movements. In fact, one painful movement may be enough to create a dread of the toilet that lasts six or eight months. Whatever the cause of the initial resistance, the mother's insistence increases the child's obstinancy, anxiety, and guiltiness. When he eventually decides to give in and perform in the right place, he may show anxiety over other forms of dirtiness too. Suppositories and enemas, used after a training struggle has begun, are resisted with rage and terror and often hasten the character distortion.

(Continued on Page 878)

Advantages of a Uniform Infant Formula

By Sarah S. Schooten, B.S., M.D.
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IT IS USUALLY considered good practice to maintain the artificially-fed infant on substantially the same formula throughout the bottle-feeding period, simply adjusting the caloric intake to meet the child's growing needs. This ideal is often difficult of attainment in the present era of widespread travel and frequent home moving.

Prescription of a complete infant formula solves many of the problems, resulting from traveling with a baby, for the mother, infant, and physician. The use of such a food, particularly one which is readily obtained everywhere, largely eliminates the upsets which may be caused by change in source of formula ingredients. The constancy of the formula, the freedom from carrying or obtaining more than one formula ingredient, the simplicity of formula preparation, and the substantial time saved, appeal to both mother and physician, and lessen the risk of digestive upset in the infant.

As with all cow's milk formulae, such a complete food should have certain characteristics. The protein content must be relatively high to compensate for differences in biological value between cow's milk and human milk proteins. The fat level should be moderately low, as finely dispersed as possible, and with a minimum of the volatile fatty acids. The carbohydrate content must assure an adequate caloric intake and be of such structure as to supply the infant's needs for as long as possible between feedings. Vitamins A, B_1, and D are desirably present at levels which assure supplying, at least, the infant's minimum daily requirements. There is also a substantial need for calcium, phosphorus, and iron in the formula. (Vitamin C is almost universally supplied in the form of orange juice or ascorbic acid.)

In order to test the adequacy and simplicity of such a complete infant food*, a group of infants were fed under normal, practical, hospital, and home conditions. All the mothers had been interviewed and had agreed to participate in the study. Mimeographed forms were prepared for hospital and home use; daily records were kept showing the formula, amount fed, number and character of stools, and any special observations for each infant. These records were tabulated in the office and the infants were examined and weighed periodically during regular office visits.

Normal, or below average, environmental conditions prevailed in all cases. Very few restrictions were imposed on the mothers in their care of these infants. The test was so conducted that the results could be applied to any average feeding practice. Some of the mothers, who had successfully raised one or more previous babies, tended to introduce solid foods at an early age, but this was discouraged in order to eliminate as many interfering factors as possible. Some additional vitamins were

TABLE I.

Infant No.	Sex	Date of Birth	Days in Hospital	Birth Weight lbs.	Discharge Weight lbs.
1	M	11/19/48	6	7.2	6.8
2*	F	11/20/48	5	7.1	7.0
3*	M	11/20/48	5	6.5	6.2
4	F	11/26/48	13	8.1	6.1
5	F	11/27/48	7	8.9	8.5
6	M	11/27/48	8	8.2	7.6
7*	M	11/27/48	7	8.3	7.9
8*	M	11/27/48	7	5.8	5.8
9	M	12/ 7/48	5	10.3	9.8
10	M	12/ 8/48	4	8.0	7.4
11	F	12/15/48	5	5.5	5.1
12	F	12/15/48	5	6.9	6.7
13	F	12/16/48	8	5.6	5.3
14	M	12/16/48	7	8.1	8.1
15	M	12/20/48	4	7.5	7.3
16	M	1/ 4/49	5	8.3	7.8
17	M	1/ 6/49	6	5.1	5.0
18	F	1/11/49	5	7.4	6.6
19	M	1/27/49	5	6.4	6.4
20	M	2/ 5/49	5	9.2	9.1
21*	F	2/12/49	5	7.2	6.8
22*	F	2/12/49	5	7.8	7.1
23	M	2/15/49	4	8.0	7.9
24	F	2/16/49	7	9.3	9.3
25	F	2/18/49	6	6.6	6.1
Average All Babies			6.0	7.5	7.2
Average Male Babies		(14)		7.6	7.4
Average Female Babies		(11)		7.3	7.0

*Twins

TABLE II.

Infant No.	Calories Per Day Per Pound of Body Weight at Discharge	at 4 weeks	at 8 weeks
1	x	68.4	48.6
2*	x	77.8	70.2
3*	x	80.9	67.2
4	x	35.6	38.8
5	x	68.6	45.2
6	26.4	20.0	17.1
7*	x	34.5	30.8
8*	x	29.1	42.8
9	x	58.0	36.6
10	Breast-fed	Breast-fed	47.7
11	64.7	71.1	64.6
12	x	49.6	53.6
13	45.5	55.1	52.6
14	x	65.9	48.0
15	17.1	57.8	46.7
16	21.2	73.2	54.5
17	25.0	55.3	Discontinued
18	Breast-fed	58.6	80.9
19	x	62.4	30.5
20	29.4	25.0	43.8
21*	18.1	70.4	44.3
22*	15.9	70.9	46.3
23	x	46.3	53.4
24	28.7	42.7	65.0
25	24.8	73.2	54.5
Average	29.7	55.7	49.8

*Twins
x Denotes Partial Breast-feeding

*New Improved Biolac supplied by Prescription Products Division, The Borden Company, New York, New York.

TABLE III.

Infant No.	2 Weeks lbs.	4 Weeks lbs	8 Weeks lbs.	12 Weeks lbs	16 Weeks lbs.	20 Weeks lbs.	24 Weeks lbs.
			Weight At				
1	7.2	8.2	10.3	12.5	13.8	15.7	17.0
2*	7.4	8.8	11.4	13.5	15.3	16.7	17.7
3*	7.3	8.9	11.9	13.9	15.3	16.9	18.5
4	8.3	9.0	10.3	11.5	12.5	13.5	14.6
5	9.3	10.1	13.3	16.0	17.9	19.2	20.6
6	8.0	9.0	11.7	13.4	14.0	15.1	16.2
7*	8.9	10.3	13.0	14.5	15.5	17.3	18.8
8*	7.1	8.7	11.2	13.2	14.8	16.3	17.6
9	10.9	11.9	13.1	14.0	15.7	17.1	18.7
10	7.8	8 6	10.5	13.1	16.3	17.6	19.4
11	6.0	6.8	9.3	11.7	14.3	16.1	17.7
12	7.3	8.1	9.9	12.4	13.9	15.3	16.3
13	5.6	6.9	9.1	11.7	13.9	14.6	16.3
14	8.6	9.1	12.5	x	x	x	x
15	7.8	8.3	12.0	13.5	14.9	18.0	19.6
16	7.8	8.8	11.2	13.6	15.4	17.5	18.5
17	5.9	6.8		x	x	x	x
18	7.2	8.2	9.9	11.4	13.3	14.2	15.3
19	7.1	7.7	11.8	13.5	14.6	16.3	18.0
20	9.3	10.0	12.8	15.6	17.4	19.1	20.7
21*	7.5	8.5	11.3	13.5	15.0	15.8	18.4
22*	7.6	8.5	10.8	12.1	13.0	14.0	16.8
23	7.8	8.0	10.1	12.1	13.6	15.1	16.2
24	9.5	10.3	12.0	13.8	14.9	16.4	18.0
25	6.3	7.0	9.0	10.9	12.5	13.5	14.6
Average	7.7	8.5	11.2	13.1	14.7	16.1	17.6

*Twins
x Discontinued

TABLE IV.

Infant No.	1st 2 Weeks	2nd 2 Weeks	2nd Month	3rd Month	4th Month	5th Month	6th Month
			Weight Gain During Period of				
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1	.0	1.0	2.1	2.2	1.3	1.9	1.3
2*	.3	1.4	2.6	2.1	1.8	1.4	1.0
3*	.8	1.6	3.0	2.0	1.4	1.6	1.6
4	.2	.7	1.3	1.2	1.0	1.0	1.1
5	.4	.8	3.2	2.7	1.9	1.3	1.4
6	−.2	1.0	2.7	1.7	.6	1.1	1.1
7*	.6	1.4	2.7	1.5	1.0	1.8	1.5
8*	1.3	1.6	2.5	2.0	1.6	1.5	1.3
9	.6	1.0	1.2	.9	1.7	1.4	1,6
10	−.2	.8	1.9	2.6	3.2	1.3	1.8
11	.5	.8	2.5	2.4	2.6	1.8	1.6
12	.4	.8	1.8	2.5	1.5	1.4	1.0
13	.0	1.3	2.2	2.6	2.4	.7	1.7
14	.5	.5	3.4	x	x	x	x
15	.3	.5	3.7	1.5	1.4	3.1	1.6
16	−.5	1.0	2.4	2.4	1.8	2.1	1.0
17	.8	.9		x	x	x	x
18	−.2	1.0	1.7	1.5	1.9	.9	1.1
19	.7	.6	4.1	1.7	1.1	1.7	1.7
20	.1	.7	2.8	2.8	1.8	1.7	1.6
21*	.3	1.0	2.8	2.2	1.5	.8	2.6
22*	−.2	.9	2.3	1.3	.9	1.0	2.8
23	−.2	.2	2.1	2.0	1.5	1.5	1.1
24	.2	.8	1.7	1.8	1.1	1.5	1.6
25	−.3	.7	2.0	1.9	1.6	1.0	1.1
Average	.25	.92	2.45	1.98	1.59	1.46	1.49

*Twins
x Discontinued

prescribed for the first few infants, but these were also discontinued early in the study, as adequate levels of vitamins A and D, thiamin, and riboflavin were provided by the formula. Only ascorbic acid was routinely prescribed.

Twenty-five normal, full-term infants were started in this study. Two discontinued, and twenty-three completed six months or longer (twelve males and eleven females). It is of interest to note that three sets of twins—numbers 2 and 3, 7 and 8, 21 and 22—were included.

The babies remained in the hospital an average of 6.0 days. The formula was started on the second day at a 1-to-4 formula to water dilution, the

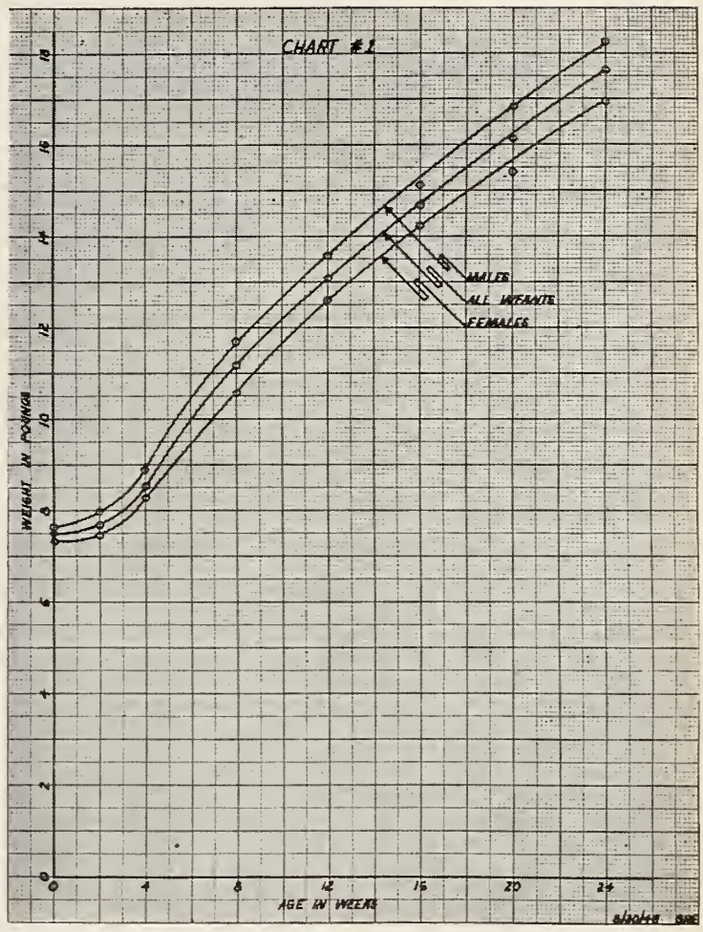

Chart I

amount fed varying with the weight and individual requirements of each infant. While in the hospital, fourteen of the infants were partially, or completely, breast-fed. At discharge, the remaining babies were receiving an average of 12.4 fluid ounces of formula per day, equivalent to 29.7 calories per pound of body weight. By the fourth week of age, the feedings averaged 58 calories per pound of body weight, per day; and in the eighth week the average was 50 calories.

As the infants were fed *ad libitum,* it would be expected that the amounts of formula consumed would vary rather widely; this was found to be true. One infant, number 15, took up to 42 ounces of formula per day (70 calories per pound of body weight); number 19 took 44 ounces (55 calories per pound); and number 18 took 64 ounces per day regularly, for over a month (95 or more calories per pound). In all of these cases, the formula was exceptionally well tolerated, no spitting up or vomiting being noted, and only one or two stools per day of normal character occurred. These large feedings confirm the observation made throughout the study, that such a complete formula is well tolerated.

Table I summarizes the birth and discharge data.

Table II shows caloric intake at discharge, four weeks, and eight weeks of age. Two infants, numbers 10 and 18, were completely breast-fed for six and three weeks, postpartum, respectively.

Growth and development of all these infants was satisfactory. Table III shows the individual weights and Table IV the weight gains at four-week intervals; it is to be noted that all showed a smooth, steady increase without setbacks. Chart 1 illustrates the averages in graphic form.

Observations in this study have shown the stools of these infants to be normal and, in general, to resemble the soft yellow of the breast-fed infant. The daily records kept by the mothers, and checked at office or home visits, showed an average of 2.7 stools per day during the first week after discharge, 2.6 per day the second week, 2.7 per day the third week, 2.2 per day the second month, and 2.0 per day the third month. Notations as to type of stool were almost continuously "yellow, medium soft" with only occasional instances of increased frequency, which shortly returned to normal with routine care. On the other hand, there were no reports of constipation, which is so frequently a problem of the artificially-fed infants; only scattered notes of an occasional one or two hard stools, which also quickly cleared without special attention were reported. It is believed to be of significance that, during the early months of this study, there was a general epidemic of diarrhea among babies in the Detroit area; but the infants in this group were exceptionally free from this complaint.

The daily records showed a marked lack of spitting up and vomiting among all the babies, and in no case was this serious enough to require special attention. Furthermore, as the infants became older, the usual pre-teething, drooling and fretfulness were noticeably lacking.

Summary

Twenty-three normal full-term infants were fed a complete formula until six months of age. Periodic weight reports, also daily feeding, stool, and vomiting records were kept on all infants. The small postnatal loss of weight, the normal weight gains, the normal stool conditions, and the lack of vomiting, when considered together, indicate the eminently satisfactory results obtained from the feeding of a commercial, complete formula to an unselected group of average infants. It is believed to be of special significance that the progress of the three sets of twins was so outstanding. In addition to the excellent feeding results, the nationwide availability of a product of constant composition and uniform quality, suggests the desirability of the use of such a complete formula food for general well infant feeding.

MSMS

VISITS MICHIGAN MEDICAL SCHOOL

(Continued from Page 764)

More institutions are likely to be created in the near future.

The progress in medical education and other advances in this direction gained footing after India took up the new changes in government.

Admissions to the medical colleges in India are done by a selection committee after an interview, and in some institutions special tests are used. Admissions are confined to the candidates from the province where the college is situated. It may be that, in the near future, candidates from areas which are very unhealthy may get special consideration as they would be able to settle and practice in their own areas and could do good among the people of that area. There is no consideration of caste, creed or nationality for admission to a medical college, the chief criterion being university results and interviews.

The facilities for practical training and research in India exist sufficiently, and the hospitals provide sufficient variety of human ailments for the study of students. Animal experiments have always been done and are ever increasing, not only for fundamental research but also for research that has direct bearing on human disease. Animals are available aplenty, and there is no anti-vivisectionist opposition.

There is no religious barrier to post-mortem examinations and with proper persuasion post-mortems are available. Attempts are being made to increase facilities for post-mortems in order to improve medical education. There is no dearth of dissection material, and every student dissects the body at least once, if not more, before he completes his study of human anatomy.

Dr. Narayana was greatly impressed with the teaching of anatomy in the United States. He feels that the teaching of anatomy should be based on the study of physiological function and integration of the subjects of Anatomy, Physiology and Pharmacology as is done in the United States. This, he feels, is essential for all institutions.

Advanced Abdominal Pregnancy

Case Report

By Robyn J. Arrington, M.D., and
Delford G. Williams, M.D.
Detroit, Michigan

THIS CASE OF advanced abdominal pregnancy is being presented because of its unusual interest and for its statistical value. Abdominal pregnancies as a general rule result from fertilization of the ovum and its arrest somewhere between the ovary and the uterine cavity. If it is fertilized in the abdominal cavity prior to its entrance into the fallopian tube, primary abdominal pregnancy results; if fertilization takes place in the ovary or tube with subsequent rupture into the abdominal cavity, secondary abdominal pregnancy is the result. Primary and secondary abdominal pregnancies have been mentioned in the literature but the former is extremely rare.

A review of the available literature reveals a number of articles concerning abdominal pregnancies. The true frequency of abdominal pregnancy in figures is not known but the condition is rather rare. Branscomb, however, reports three cases in one hospital in a two-month period. Of these three cases, the fetus, in one case, survived, but the mother died immediately following the laparotomy. In the other two cases, the mothers survived but both fetuses died; one was macerated and died before operation, and the other died about two hours after surgical delivery.

According to De Lee, the actual causes of ectopic pregnancy are unknown but he offers several possible causes: (1) salpingitis, (2) pelvic adhesions, (3) infantile tubes with defective development of the cilia, (4) excessively long tubes, (5) diverticula and accessory tubes, (6) spasm of the tubes, muscular insufficiency, and anti-peristalsis (Lahm), (7) abnormal corpus luteum, (8) endometriosis of the tube, or of the ovary, or cul-de-sac causing primary ovarian or abdominal pregnancy, and (9) increased invasiveness of the trophoblast covering the ovum.

Abdominal pregnancies may follow one of several courses. The fetus may die, become resorbed, mummified or form a lithopedion. The fetus may survive and be removed by laparotomy, thus resulting in a healthy normal child. In some cases, the child survives but due to inadequate blood supply before delivery, the child has mental or physical defects.

Surgical treatment is the best type of treatment for cases of abdominal pregnancy, but the proper time for the surgery to be performed is often a difficult decision. If the mother and child are both taken under consideration, the best time is the thirty-eighth week, because more children survive that are delivered at this stage of development. However, if one desires to give the mother a better chance for recovery, then early surgical intervention is preferable.

If the fetus is dead, operation should be deferred until such a time as the placenta has undergone atrophic changes, and become less vascular with a definite line of demarkation. This usually requires four to six weeks after the death of the fetus. During this waiting period, patient should be under careful observation.

Case Report

Mrs. C. D., a twenty-nine-year-old, para I, gravida II, woman was admitted to Trinity Hospital on April 13, 1949, complaining of crampy pains in the epigastrium and stating that she was ready to deliver. Her last menstrual period was July 20, 1948. When the patient had experienced two months of amenorrhea associated with morning sickness, she attempted an abortion on herself by taking quinine and turpentine, without results. Following this, the patient consulted an abortionist who attempted an abortion by injecting medication into her uterus. Twelve hours later, the patient began complaining of severe crampy pains just below the umbilicus. The pains occurred every hour at first, then increased in frequency until they were at the rate of every fifteen to twenty minutes and finally ceased after about a twenty-four-hour period.

Following this, the patient decided to have the baby and consulted a medical doctor for prenatal care. She progressed very well until February 26, 1949, at which time she began complaining of crampy pains in the epigastrium. At this time the abdomen was distended up to the epigastrium. A physician was called in, and he informed the patient that she was threatening a premature delivery. She was confined to bed and treated for her condition for one week, with improvement. The patient had a rather normal course until April 12, 1949, at which time the cramp-like pains returned to the abdomen. Patient's relatives were unable to locate her physician and, therefore, took her to Receiving Hospital. The patient was transferred to Trinity Hospital for delivery.

Dr. Arrington is director of the Department of Obstetrics, Trinity Hospital, and Dr. Williams is Chief Resident, Trinity Hospital, Detroit.

Physical examination on admission revealed:
Blood pressure 90/60, pulse 80, respiration 20.
Temperature 98.6.
Head: Negative.
Neck: Negative.
Chest: Lung fields resonant and clear.
Heart: Normal in size and position and free of murmurs. Rate and rhythm normal.
Breasts: Enlarged and colostrium was expressed with ease.

Abdomen.—Ovoid from symphisis to xyphoid. The fetus's back was felt on the right side and the small parts felt on the left side. The fetal parts were unusually superficial. The head could very easily be palpated in the epigastrium and the soft parts in the pelvis. The fetal heart tones were best heard in right upper quadrant; rate, 140 per minute.

Pelvic Examination.—Revealed soft bluish cervix, with a closed os. Soft parts palpated at station minus two.

Rectal Examination.—Confirmatory.

X-ray examination was made of the abdomen in several positions, posterior, lateral, and diaphragmatic. The films showed a single, large fetus, in the late third trimester of gestation. At this time the buttocks were presenting, the back was on the right and anterior.

The maternal pelvis was not deformed and appeared to be ample. There was no visible evidence of pelvic pathology. No free gas was seen under the right diaphragm and there was no other evidence of abdominal pathology. Impression: pregnancy, single, third trimester, breech presentation.

Laboratory Data—

Urine: Albumin 1 plus, sugar negative. Specific gravity 1.020, color amber. Reaction, acid.

Blood: Hemoglobin 13.5 gm., red blood count 3,770,000, white blood count 11,200. Differential: polymorphonuclear cells 90, non-filamented cells 1, lymphocytes 9.

Kahn: Doubtful.

A diagnosis of intra-abdominal pregnancy was made and the patient was taken to the operating room on April 15, 1949, for exploratory laparotomy. The fetus was found free in the abdominal cavity in a breech presentation and covered by a very thin amniotic sac. The fetus and sac were delivered together. The sac was opened and the cord cut between clamps. The placenta was found attached to the posterior right half of the uterus, the right tube, ovary, broad ligament, the cecum, appendix, and the rectum. The placenta was freed by blunt and sharp dissection. There was moderate bleeding. The patient received plasma and blood during the operation and immediately after returning to the ward.

Pathological Report.—Gross: The placenta is of full-term size and weighs 775 gm. The cord measures 36 cm. in length. Portions of the placenta are considerably thickened and yellowish white. On section these thickened areas are of a fibrous consistency and vary from 2 to 15 mm. in thickness. A number of fibrous infarctions are present. The appendix measures 5 cm. in length and contains a number of adhesions. The serosal surface is purplish in color.

Microscopic Diagnosis.—Multiple infarctions of the placenta with scattered calcific deposits in necrotic areas. Decidual reaction of omentum and appendicial serosa. Portion of fallopian tube. No ovarion tissue seen.

Course.—The mother had an uneventful recovery and was discharged on the tenth postoperative day. The baby was a male infant weighing 5 pounds 15 ounces; respiration was delayed several minutes. The baby was put in an incubator with oxygen.

The hospital pediatrician was called prior to the operation and had charge of the case from the time of birth. The infant died after twenty-six hours.

Conclusion

A case of advanced abdominal pregnancy has been presented with its clinical course and management.

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HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

(Continued from Page 762)

tee, meetings of February 1 and March 22; Maternal Health Committee, meeting of March 7; Joint Committee with Michigan State Board of Registration in Medicine, meetings of March 8 and April 26; Blood Bank Committee, meeting of March 9; Legislative Committee, meeting of April 13; Special Committee on Education, meetings of April 13 and May 29; Child Welfare Committee, meeting of April 26; Michigan Professional and Health Service Representatives' meeting of April 28; Commission on Healing Arts, meeting of May 3; Public Relations Committee, meeting of May 7; Committee on Arrangements and Sub-committee on Programs for 1951 Michigan Post-Graduate Clinical Institute, meetings of March 9 and May 10; Rheumatic Fever Control, meeting of May 10; Post-Graduate Medical Education Committee, meeting of May 11; Rural Medical Service Committee, meeting of May 11; and Venereal Disease Control Committee, meeting of May 14.

Treatment of Perforated Peptic Ulcer in a General Hospital

Statistical Analysis

By Roland P. Reynolds, M.D.,
Meyer O. Cantor, M.D., and
Charles Stebbins, M.D.

Detroit, Michigan

PAPERS DISCUSSING the treatment of perforated peptic ulcers are found to emanate chiefly from medical centers or university hospitals throughout the country. In centers of this type, surgical facilities are usually of the best, teamwork well established, and the bulk of the work is done by a relatively few highly trained surgeons. In a metropolitan area, however, the hospitals are staffed by a large number of surgeons trained in widely varying fashions. Whereas in a medical center most of the work is done by a small number of surgeons, in a metropolitan center and in a general hospital serving such a center many surgeons operate on such cases. Instead of a relatively fixed technique as found in university centers, a variety of techniques are employed, depending upon the skill and training of the surgeon in charge. In addition, most of the patients are first seen by a family general practitioner who must make the correct diagnosis and hospitalize the patient before the surgical staff can enter into the case at all. For these reasons, it would seem that the mortality and morbidity rates for patients treated in medical centers throughout the country should be appreciably better than those in a general hospital such as Grace Hospital. To determine whether such was really the case this statistical study was undertaken.

One hundred and forty-three patients were admitted to the Grace Hospital, between the years 1943 to 1949, with a diagnosis of acute perforated gastroduodenal ulcer. The statistical data on this group of patients may be summarized as follows:

	Cases	*Per Cent*
1. Patients	143	
a. Males	130	91
b. Females	13	9
c. Age:		
(1) Youngest Case	21 years	
(2) Oldest Case	76 years	
(3) Average Age	46.1 years	
(4) Incidence Between	30-50 years	60
2. Type of Ulcer:		
a. Duodenal Ulcer	92	64
b. Gastric Ulcer	40	28
c. Location Not Diagnosed	11	8
3. Previous History:		
a. Previous Perforations	9	6
b. Previous Gastric Disturbance	106	70
c. Ingestion of Alcohol, Immediately Before Onset	18	12.5
d. Ingestion of Large Meal or Unusual Food Immediately Before Onset	5	3.4
e. Hematemesis or Tarry Stools Just Prior to Perforation	22	15
4. Present Illness:		
a. Sudden Onset of Pain	124	84
b. Shoulder Pain	24	16
c. Pain Localized in Right Upper Quadrant	23	16
d. Nausea and Vomiting	77	54
e. Rigidity of Abdomen	130	91
5. Treatment:		
a. Surgically Treated	126	88
(1) Closure of Ulcer with Omental Graft	109	86
(2) Closure of Ulcer with Appendectomy	5	5
(3) Appendectomy	1	1
(4) Partial Gastrectomy	1	1
(5) Drainage Only	5	4
(6) Excision of Ulcer	1	1
(7) Closure and Biopsy	3	2
b. Medically Treated	17	12
c. Drainage of Abdomen:		
(1) Abdomen Drained 1943-1946	35	30
1947-1948	3	7
(a) Peritonitis or Delayed Wound Healing	17	44
(b) Average Stay in Hospital—17 days		
(2) Abdomen Not Drained		
(a) Peritonitis or Delayed Wound Healing		19
(b) Average Stay in Hospital—11 days		
6. Mortality:		
a. Surgical Deaths 1943-1946	12	14
1947-1948	0	0
b. Medical Deaths	10	60
c. Causes of Death:		
(1) Peritonitis	9 Patients	
(2) Shock	11 Patients	
(3) Pneumonia	1 Patient	
(4) Diabetic Acidosis	1 Patient	

Comment

With the exception of a few isolated patients, the majority of surgeons were conservative in their treatment of this type of case. Simple closure, as advocated by Roscoe Graham, using a free omental graft, was utilized in 88 per cent of all cases. Most of these patients were operated upon by this procedure between the years of 1947 through 1948. During this period of time, forty-three patients were operated upon without a death. The mortality rate of 14 per cent per the years of 1943 through 1946 compares favorably with that noted in reports throughout the country. Only one patient was subjected to partial gastrectomy in this series of patients. Reports from the European literature would suggest that subtotal gastrectomy is the treatment of choice for such cases. American and English surgeons on the other hand are content to simply close the ulcer over a free omental graft. The remarkably lowered mortality rate enjoyed by patients thus operated upon speaks eloquently for its effectiveness.

The majority of patients in whom a simple closure of the perforation is the operative procedure enjoy good health and freedom from symptoms following operation. Six per cent of these patients in our series of cases, however, gave a history of previous perforation. One patient had had a perforation on two separate occasions. There is a unanimity of opinion that patients that have perforated and have continued to have symptoms of ulceration should be considered as candidates for gastrectomy. Since the majority of patients subjected to a simple closure seem to enjoy good health postoperatively, there seems to be little point to subjecting them to subtotal gastrectomy at that time.

"To drain or not to drain" has ever been the problem for surgeons. The trend at Grace Hospital appears to be not to drain. In 30 per cent of all surgically treated patients admitted between the years 1943 and 1946, drainage was instituted, whereas only 7 per cent of all patients operated upon between the years 1947 and 1948 were drained. In that group of patients in whom the abdomen was not drained, peritonitis occurred in 19 per cent and the average hospital stay was eleven days. In the groups of patients in whom the abdomen was drained, 44 per cent developed peritonitis with an average hospital stay of seventeen days. From this it would seem that such patients do much better without drains.

The fact that more patients died of shock (eleven cases) than died of peritonitis (nine cases) would suggest that more judgment be used by the surgeon in selecting the time of operation. Several hours spent in preoperative treatment of shock will pay dividends in a lowered mortality. Fear of peritonitis need not cause surgeons to hasten to open a rigid abdomen in which a diagnosis of perforated ulcer has been made until the patient has had sufficient time to completely react from the shock of the perforation.

Conclusions

1. Surgically treated perforated peptic ulcers at a general hospital present mortality figures that compare favorably with those from medical centers or universities.
2. The adoption of simple closure of the ulcer with a free omental graft and the recognition of shock as a cause of death has resulted in not a single death in the past two years.
3. Shock, rather than peritonitis, is responsible for most of the surgical deaths in this series.

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PARKINSON'S SYNDROME

(Continued from Page 792)

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This Autumn, Let's Look Twice

Social Welfare is a temptingly fertile field for governmental legislation today, embodying as it does many of the principal opportunities for advancement of human happiness. But it is also an extremely complex area, so handicapped by the impossibility of measuring or controlling the factors in any given social equation that pat legislative solutions are impossible. This weakness does not affect the value of legislative studies of the area, and it is increasingly possible in the light of current information to determine legislative standards which appear basic to a desirable social pattern. Unfortunately, when governmental guidance overflows legislatively into an excess of statutory compulsions and controls, the very social progress sought after is destroyed through loss of basic freedoms. This is the fallacy of Socialism.

The fact that the Fair Deal program of our national administration ignores these truisms, promising all things to all men in exchange for the sacrifice of a few freedoms and the imposition of a few more political controls, should be an adequate danger signal. The further fact that the first steps would be absolute control over medical services, farm production and farm prices, each of which is a priceless commodity for political barter, is merely added proof.

As citizens, we can be certain that government can give nothing to the public for which it does not sooner or later tax the value, plus administrative costs and waste, from that same public. We can also be certain that our freedoms of thought, choice and action must necessarily decrease with every increase of governmental regulation. And as physicians, we know that the primary responsibility of the Doctor of Medicine is to his patient and his conscience, rather than to the political appointee of some Washington bureau. National elections this autumn will provide a partial determination of the future scope of Fair Deal legislation. Let's look twice at those candidates who allege that government can give us something for nothing, that national "free" distribution systems and controls do not create a socialism, or that governmental confiscation of professional services, farm management and produce prices are an adequate substitute for basic freedoms and low taxes.

W. E. Barstow M.D.

President, Michigan State Medical Society

President's

Page

Editorial

NATIONAL POLITICS BOILING

POLITICAL EXPERTS and second guessers were quick to hazard opinions on the significance of the latest swing of the pendulum of reason to the right. To some the unseating of Florida's Senator Claude Pepper indicating the beginning of the end of an administration which has nurtured socialism in its many facets. Others saw the approach of a new philosophy of liberalism.

American Medicine, present leader among the professions in the fight to preserve those ideals which have made America strong, saw in the overwhelming defeat of Senator Pepper certain signs indicating that Americans are through with radicalism and its devious ramifications.

Regardless of his political affiliation, the American Doctor of Medicine now can hope that his friends and patients are willing to follow his lead in purging the political arenas of undesirable socialist trends and personalities. Returning tourists from Florida report that American Medicine in Florida turned its full power into the defeat of Senator Pepper. Only a few months ago in a Pennsylvania district a swing to the left was prevented when the medical men actively and unanimously supported a candidate pledged to oppose further socialistic advances.

Whether it would or not, American Medicine has been forced into politics. The uncompleted job is before us. Only *time* and *work* will give the answer.

INCOME TAX DISCRIMINATION AGAINST THE PROFESSIONS

FOR MANY years we have been conscious of an income tax discrimination against the professions. Most of the professions are peculiar in that their members develop slowly into a comfortable income bracket. Training for the profession takes many costly years, and finally when the individual has prepared himself for his life work he must build up a practice or a following. This used to take up to ten years. In our present postwar era, the medical man builds up quite rapidly, but some of the others are still years in arriving at their peak income. The age of arrival at this peak income is apt to be around forty or forty-five years. A man then can expect continued good income for fifteen or twenty years, after which he must face a slowing up process. That is the experience of the past. The professional man has fifteen or twenty or at the most twenty-five years of so-called "high" income bracket.

Our present income tax laws with their graded rates do not permit a person to save enough to lay aside a competence and build an assured reasonably comfortable income for old age. All this has been taxed away. In some callings provisions exist by which measures may be taken to invest part of the current income, and have it returned in later years. This subject was thoroughly discussed in *The Journal of the American Medical Association,* April 29, 1950, pages 1357 to 1360, and reprinted in Bulletin 74. THE JOURNAL of the Michigan State Medical Society for September, 1949, suggested that our Federal laws be amended to allow professional men during this short peak income period to invest a limited amount in approved government securities which would be paid back as annuity payments to the individual when he becomes of retirement age. The income tax on this amount is not to be charged until it is received by the individual as annuities. In September, 1948, we had an editorial making the same suggestion. One of the other state medical journals (Iowa) had an editorial on this subject at about the same time. We believe the suggestion is good and worthy of consideration by Congress. We are complimented that the American Medical Association now agrees with us, even though it does not give us credit for the suggestion.

THE MIDDLE AGED LABORER

SINCE 1935, the United States has had a Federal Social Security program providing retirement income for the laborer and his wife, sixty-five or over, who has worked a designated minimum time, providing he retired and does not earn $15.00 or over in any month in a type of service covered by the Social Security old age activity. This has stimulated laboring people to retire at sixty-five. Many of our large companies have

adopted the idea of retiring laboring people and the other employes upon reaching the age of sixty-five and in some instances seventy. Organized labor has made this old age "security benefit" one of the chief objectives in its demands. Already labor leaders are not satisfied with $100 a month pension income which is contingent on the person having been employed for twenty-five years by the company.

It is very easy to understand that the middle aged person seeking employment, who will have no opportunity to work twenty-five years in one place, will begin having difficulty finding employment. When he gets in the late fifties or early sixties, the industry which has a pension program plan will not hire him.

The new Social Security Act HR6000 now being considered by Congress will add to the complications, because it will remove from the middle aged person his possibility of eking out a living when he comes to the compulsory retirement age. The retirement pay of Social Security is absolutely inadequate and the retiring pay of Industry will also be inadequate for workers who are compelled to retire at age sixty-five and have their productivity stopped. The whole nation must suffer because of the problem now being forced upon us by the present economic trend. With our average length of life now over sixty-eight, we shall have increasing numbers of persons forcibly retired who normally would have many active years ahead. Government must make the new Social Security law into an actual Social Security on which a retired man may depend. Industry must set up a program under which a man approaching compulsory retirement age who is still robust may still find employment. And Government might well reconsider the entire position of Government in this business before it widens its base of operations.

MEDICAL PROGRESS

ON JUNE 30, 1950, the Michigan Rapid Treatment Center at Ann Arbor was closed. This Center was established six years ago for the demonstration of the rapid treatment of venereal diseases, and has treated about 13,000 cases.

The termination of this Center has been under consideration for the past two years in line with decentralization of public health responsibilities to local communities. The Rapid Center was opened in July, 1944, for the treatment of patients referred by local physicians and clinics. At that time the accepted treatment of a venereal case in the physician's office required about a year and a half. The cure could be accomplished in the Center in fourteen days. Now the same use of new drugs makes it possible for the medical practitioner to treat cases in about the same length of time as the Rapid Treatment Center.

Six years ago, the reported cases of syphilis in Michigan were between 17,000 and 18,000 a year, and in 1949 that was reduced to 8,700 a year. The daily load in the Center has been reduced from 107 patients in 1947 to forty-one in 1950. With the closing of the Center, control and treatment of venereal diseases reverts to the local county where it is replaced with local health departments. The State is now operating twenty-three venereal disease clinics. The Michigan Department of Health will still assist in the control program through local health units.

Here is another instance where modern medical science is eradicating a disease which in the past has been very prominent. This Center is actually closing because of insufficient patients to warrant its continuance.

ON THE RUN . . .

Spinal-cord symptoms appearing in the patient with pernicious anemia constitute a medical emergency.

* * *

Neuroblastoma is the most common neoplasm of the abdominal cavity in early childhood.

* * *

Thyroid compression of the esophagus occurs when the gland is fibrous, hard and invasive or when it is situated substernally.

* * *

While 40 per cent of cases of myeloma have normal serum protein levels, 99 per cent show an elevation of tha serum globulin.

* * *

To evaluate completeness of removal of a chorionepithelioma or mole, repeated quantitative urine assays for gonadotropic hormone must be carried out for an extended period.

* * *

When diabetes and tuberculosis co-exist the diabetes is discovered before the tuberculosis in 65 to 80 per cent of the patients.

* * *

Suspect potassium deficiency in the patient who lapses into stupor after partial recovery from diabetic coma, shows diminished muscular tonus and develops shallow, rapid respirations.

WILLIAM S. REVENO, M.D.

Michigan State Medical Society

The 85th Annual Session and Postgraduate Conference

BOOK-CADILLAC HOTEL—DETROIT, MICHIGAN
SEPTEMBER 20-21-22, 1950

Preliminary Program

WEDNESDAY MORNING

September 20, 1950

All Assemblies and Section Meetings will be held in the Book-Cadillac Hotel, Detroit

First Assembly

A.M.

9:00 "Parotid Gland Tumors"
RAYMOND W. MCNEALY, M.D., Chicago, Illinois

9:30 "The Leukemic States: Their Differentiation and Specific Management"
CHARLES A. DOAN, M.D., Columbus, Ohio

10:00 Intermission to View Exhibits

11:00 "Pitfalls in X-Ray Diagnosis"
W. EDWARD CHAMBERLAIN, M.D., Philadelphia, Pennsylvania

11:30 "The Common Geriatric Dermatosis"
EARL W. NETHERTON, M.D., Cleveland, Ohio

Section Meetings

WEDNESDAY NOON

September 20, 1950

(12:00 noon to 1:30 p.m.)
(Luncheon Meetings)

1. DERMATOLOGY
"Unexplained Fever with Angiitis and Cutaneous Lesions"
EARL W. NETHERTON, M.D., Cleveland, Ohio

2. RADIOLOGY
"Some Harmful Effects of Irradiation and their Avoidance"
EDWARD CHAMBERLAIN, M.D., Philadelphia, Pennsylvania

WEDNESDAY

3. UROLOGY
"Urological Aspects of Spinal Cord Injury"
GEORGE C. PRATHER, M.D., Brookline, Massachusetts

4. OBSTETRICS AND GYNECOLOGY
"Report of Experience with Pitocin by Intravenous Route"
SAMUEL A. COSGROVE, M.D., Jersey City, New Jersey

5. OPHTHALMOLOGY
"Congenital Paralysis of the Inferior Oblique"
HAROLD W. BROWN, M.D., New York, New York

Second Assembly

WEDNESDAY AFTERNOON

September 20, 1950

P.M.

1:30 "Preventive Pediatrics—Behavior Aspects"
LEE F. HILL, M.D., Des Moines, Iowa

2:00 "The Effect of Pregnancy on the Urinary Tract"
GEORGE C. PRATHER, M.D., Brookline, Massachusetts

2:30 "Overcoming Hemorrhagic Mortality"
SAMUEL A. COSGROVE, M.D., Jersey City, New Jersey

3:00 Intermission to View Exhibits

4:00 "Management of Strabismus in Children"
HAROLD W. BROWN, M.D., New York, New York

4:30 "Aneursyms and Arterio-Venous Fistulas"
HARRIS B. SHUMACKER, JR., M.D., Indianapolis, Indiana

GENERAL (PUBLIC) MEETING

WEDNESDAY EVENING

September 20, 1950

Grand Ballroom, Book-Cadillac Hotel, Detroit

P.M.

8:30 to 10:00 Officers' Night

1. Induction of members of "Fifty Year Club"
2. Presentation of scrolls:
   (a) Commemorating University of Michigan Medical School Centenary
   (b) Honoring E. L. Henderson, M.D., Louisville, Ky., President, American Medical Association and World Medical Association.
3. Presidential Address
   By W. E. Barstow, M.D., St. Louis, Michigan
4. Biddle Lecture
   By J. O. Christianson, Ph.D., Saint Paul, Minnesota

Third Assembly

THURSDAY MORNING

September 21, 1950

A.M.

9:00 "Ovarian Cystomata"
Herbert F. Traut, M.D., San Francisco, California

9:30 "Lesions of the Mouth"
Paul M. Moore, Jr., M.D., Cleveland, Ohio

10:00 Intermission to View Exhibits

11:00 "Birth Injuries in Retrospect"
Charles F. McKhann, M.D., Cleveland, Ohio

11:30 "The Doctor's Responsibility in Atomic Diseases or Chronic Diseases, A Public Health Problem."
Vlado A. Getting, M.D., Boston, Massachusetts

Section Meetings

THURSDAY NOON

September 21, 1950

(12:00 noon to 1:30 p.m.)
(Luncheon Meetings)

1. PEDIATRICS
   "Follow-up of Carotid-Jugular Anastomosis in Children with Mental Retardation"
   Charles F. McKhann, M.D., Cleveland, Ohio
2. SURGERY
   "Pancreatitis"
   James T. Priestley, M.D., Rochester, Minnesota
3. OTOLARYNGOLOGY
   "Cysts of the Head and Neck"
   Paul M. Moore, Jr., M.D., Cleveland, Ohio
4. PUBLIC HEALTH AND PREVENTIVE MEDICINE
   "Mass Screening or the Multiphasic Clinic."
   Vlado A. Getting, M.D., Boston, Massachusetts

Fourth Assembly

THURSDAY AFTERNOON

September 21, 1950

P.M.

1:30 "Hodgkin's Disease Treatment and Factors Influencing Results"
Antonio Rottino, M.D., New York, New York

2:00 "Clinical Use of the Newer Antibiotics in Surgery"
William A. Altemeier, M.D., Cincinnati, Ohio

2:30 "Does Uterine Myoma Always Mean Operation?"
William F. Mengert, M.D., Dallas, Texas

3:00 Intermission to View Exhibits

4:00 "Problems of Mid-pelvic Dystocia"
John L. McKelvey, M.D., Minneapolis, Minnesota

4:30 "Surgical Lesions of the Stomach"
James T. Priestley, M.D., Rochester, Minnesota

SECTION LUNCHEONS

at the MSMS Annual Session will be held in the
English Room, Book-Cadillac Hotel, Detroit
on September 20-21-22, 1950, at 12:00 P. M.

* * *

After the daily Luncheon, those in attendance will disperse to the various Section Meeting Rooms to hear the scientific presentations, 1:00 to 1:30 P. M.

STATE SOCIETY NIGHT

THURSDAY EVENING

September 21, 1950

Grand Ballroom, Book-Cadillac Hotel

10:30 An evening of entertainment for all registrants their ladies and guests

Dancing and Floor Show

Host: Michigan State Medical Society.

(Admission by card furnished to all registrants)

ONLY ONE MORE DAY TO VISIT YOUR MANY FRIENDS IN THE EXHIBIT

Fifth Assembly

FRIDAY MORNING

September 22, 1950

A.M.

9:00 **"Clinical Application of Adrenergic Blockade in Sympathetic Predominance"**
FREDRICK F. YONKMAN, M.D., Summit, New Jersey

9:30 **"The Present Status of the Syphilis Problem"**
LOUIS A. BRUNSTING, M.D., Rochester, Minnesota

10:00 **Intermission to View Exhibits**

11:00 **"The Complications of Diabetes and Their Management"**
PRISCILLA WHITE, M.D., Boston, Massachusetts

11:30 "The Modern Treatment of Epilepsy"
FREDERICK A. GIBBS, M.D., Chicago, Illinois

Section Meetings

FRIDAY NOON

September 22, 1950

(12:00 noon to 1:30 p.m.)
(Luncheon Meetings)

1. **PATHOLOGY**
   "The Limitations of Histopathology in the Diagnosis of Granulomas"
   JOHN R. MCDONALD, M.D., Rochester, Minnesota

2. **MEDICINE**
   "Neurogenic Hypertension, Chemical Approaches to its Amelioration"
   FREDRICK F. YONKMAN, M.D., Summit, New Jersey

3. **GENERAL PRACTICE**
   "NPH-50 Insulin"
   PRISCILLA WHITE, M.D., Boston, Massachusetts

4. **NERVOUS AND MENTAL DISEASES**
   (Subject to be announced.)
   FREDERICK A. GIBBS, M.D., Chicago, Illinois

Sixth Assembly

FRIDAY AFTERNOON

September 22, 1950

P.M.

1:30 **"Carcinoma of the Lung"**
WILLIAM F. RIENHOFF, JR., M.D., Baltimore, Maryland

2:00 **"The Diagnosis, Treatment and Prevention of Whooping Cough"**
WILLIAM L. BRADFORD, M.D., Rochester, New York

2:30 **"The Clinical Importance of 'Early Cancer'"**
JOHN R. MCDONALD, M.D., Rochester, Minnesota
(Co-Author: Lewis B. Woolner, M.D.)

3:00 **Intermission to View Exhibits**

4:00 **"Obstruction of the Common Duct by Stone"**
WARREN H. COLE, M.D., Chicago, Illinois

4:30 **"The Elderly Patient"**
EDWARD L. BORTZ, M.D., Philadelphia, Pennsylvania

ASSEMBLIES END AT 5:00 P.M.

DISCUSSION CONFERENCES

TWENTY-TWO QUIZ PERIODS

All to be held in Book-Cadillac Hotel, Detroit

Wednesday, September 20, 5:00 to 6:00 p.m.

Dermatology: E. W. Netherton, M.D., Cleveland, Ohio—Founders Room.

Medicine: C. A. Doan, M.D., Columbus, Ohio—Esquire Room.

Gynecology and Obstetrics: S. A. Cosgrove, M.D., Jersey City, New Jersey—Pan American Room.

Ophthalmology: H. W. Brown, M.D., New York City, New York—Suite 808.

Pediatrics: L. F. Hill, M.D., Des Moines, Iowa—English Room.

Radiology: W. E. Chamberlain, M.D., Philadelphia, Pennsylvania—Suite 500.

Surgery: R. W. McNealy, M.D., Chicago, Illinois and H. B. Shumacker, Jr., M.D., Indianapolis, Indiana—Grand Ballroom.

Urology: G. C. Prather, M.D., Brookline, Mass.—Parlors G-H-I.

Thursday, September 21, 5:00 to 6:00 p.m.

General Practice: W. F. Mengert, M.D., Dallas, Texas—English Room.

Medicine: Antonio Rottino, M.D., New York City, New York—Esquire Room.

Gynecology and Obstetrics: J. L. McKelvey, M.D., Minneapolis, Minnesota and H. F. Traut, M.D., San Francisco, California—Suite 808.

Otolaryngology: P. M. Moore, Jr., M.D., Cleveland, Ohio—Founders Room.

Pediatrics: C. F. McKhann, M.D., Cleveland, Ohio—Pan American Room.

Public Health and Preventive Medicine: V. A. Getting, M.D., Boston, Mass.—Parlors G-H-I.

Surgery: W. A. Altemeier, M.D., Cincinnati, Ohio and J. T. Priestly, M.D., Rochester, Minnesota—Grand Ballroom.

Friday, September 22, 4:30 to 5:30 p.m.

Medicine: E. L. Bortz, M.D., Philadelphia, Penna., and F. F. Yonkman, M.D., Summit, New Jersey—Grand Ballroom.

General Practice: Priscilla White, M.D., Boston, Massachusetts—English Room.

Nervous and Mental Diseases: F. A. Gibbs, M.D., Chicago, Illinois—Founders Room.

Pathology: J. R. McDonald, M.D., Rochester, Minnesota—Pan American Room.

Pediatrics: W. L. Bradford, M.D., Rochester, New York—Parlors G-H-I.

Surgery: W. H. Cole, M.D., Chicago, Illinois and W. F. Rienhoff, Jr., M.D., Baltimore, Maryland—Esquire Room.

Syphilology: L. A. Brunsting, M.D., Rochester, Minnesota—Suite 500.

Detach, fill in bottom line, and display in office or on office door

Doctor Is Out

He is attending the 85th Annual Session of the Michigan State Medical Society at Detroit where he is hearing scientific lectures by the nation's leading scientists and viewing the latest medical and surgical techniques and equipment by movies and exhibits.

Doctor will be in his office.....

WOMAN'S AUXILIARY

24th Annual Meeting, Hotel Statler

PROGRAM

MONDAY, SEPTEMBER 18, 1950

P.M.

1:00 to 5:00 **Registration,** Oak Foyer

TUESDAY, SEPTEMBER 19, 1950

A.M.

9:30 (all day) **Registration,** Oak Foyer

10:30 **Finance Committee,** President's Suite

P.M.

6:30 **Subscription Dinner and Card Party**

6:30 **Past Presidents and Secretaries Dinner**
Mrs. T. G. Amos, Chairman

WEDNESDAY, SEPTEMBER 20, 1950

A.M.

9:30 (all day) **Registration,** Oak Foyer

10:30 **Pre-Convention Board Meeting,** Parlor B.

P.M.

12:30 **Pre-Convention Luncheon,** Ivory Room

5:00 **Cocktail Hour,** Our Hosts—
Parke Davis & Co.

6:30 **Banquet,** Michigan Room
Presiding: Mrs. Donald R. Wright
Presentation of Convention Chairman, Mrs. W. W. McGregor
Guests of Honor—Advisory Committee of The Michigan State Medical Society:
Mrs. Arthur A. Herold, President, Woman's Auxiliary to the American Medical Association.
Speaker (to be announced)

8:30 **Michigan State Medical Society President's Night**
Biddle Oration, Book Cadillac Hotel

THURSDAY, SEPTEMBER 21, 1950

A.M.

8:00 **Organization Breakfast**
Retiring and New Directors with President-Elect, Parlor E

9:00 **Registration,** Oak Foyer

9:30 **Annual Meeting,** Michigan Room
Presiding: Mrs. Donald Wright
Call to Order
Invocation
Pledge of The Woman's Auxiliary
Announcements—Mrs. W. W. McGregor, Convention Chairman
Address of Welcome—Mrs. Wm. Foster, President Wayne County Woman's Auxiliary
Response for the Convention—Mrs. Robt. Breakey, First Vice President, Woman's Auxiliary of Michigan State Medical Society
Response for the Convention—Mrs. Audrey O. Brown
Convention Rules of Order—Acceptance
Resolutions—Mrs. Wm. B. Hubbard
President's Message—Mrs. Donald R. Wright
Reports of Officers—
President Elect—Mrs. Oscar Stryker
1st Vice President—Mrs Robert Breakey
2nd Vice President—Mrs. E. J. Upjohn
Recording Secretary—Mrs. Walter Stimson
Corresponding Secretary—Mrs. Hira Branch
Treasurer—Mrs. H. H. Gay
Report of Finance Committee—Mrs. R. H. Alter
Report of Revisions Chairman—Mrs. Frederick Buesser
In Memoriam—Mrs. G. L. Willoughby
Report of County Presidents
Unfinished Business
Report of Committee on Nominations—Mrs. W. L. Dixon
Election of Officers
Luncheon Recess

P.M.

1:00 **Annual Luncheon,** Michigan Room
Presiding—Mrs. Donald R. Wright
Announcements and Introductions
Address—Mrs. Arthur C. Herold, President Woman's Auxiliary to American Medical Association
Installation of Officers—Mrs J. Earl McIntyre
Presentation of the Gavel
Address—Mrs. Oscar Stryker
Adjournment

3:30 **Post-Convention Board Meeting**
Presiding—Mrs. Arthur Stryker
(This is compulsory for 1950-51 Officers, Committee Chairmen and County Presidents.)

COMMITTEE CHAIRMEN

Convention—Mrs. W. Wilbur MacGregor, Chairman; Mrs. L. Paul Sonda, Co-chairman.

Credentials and Registration—Mrs. Audrey O. Brown, Chairman; Mrs. Ledru O. Geib, Co-chairman.

Tickets—Mrs. Russell T. Costello, Chairman.

Hospitality—Mrs. William Foster, Chairman; Mrs. Milton Darling, Co-chairman.

Social—Mrs. William T. McAlonan, Chairman; Mrs. George Sewell, Co-chairman.

Courtesy—Mrs. Roscoe V. Cavell, Chairman.

Flowers—Mrs. Harold Sawyer, Chairman.

Publicity—Mrs. William L. Sherman, Chairman.

Finance—Mrs. Robert L. Novy, Chairman.

Printing—Mrs. Ivan C. Berlien, Chairman.

Pages—Mrs. Frederick G. Buesser, Chairman.

Past Presidents' Dinner—Mrs. Grover T. Amos, Chairman.

Committee Annual Reports

ANNUAL REPORT OF MENTAL HYGIENE COMMITTEE, 1949-50

Your Mental Hygiene Committee has held five meetings during the past year. Our members have functioned individually as well as collectively in attempts to advance mental health research education and legislation. It has been a privilege for us to be able to serve. Your chairman is most grateful for the ready good-natured cooperation he has received.

Juvenile delinquency, sexual deviation, alcoholism, mental hygiene in schools and colleges, development of medical school curriculum, and family living consideration, have been discussed at Committee meetings. Your Committee feels privileged in being called upon by the Michigan State Medical Society for considered judgment regarding mental health problems. This Committee feels that there is a great need on the part of many physicians for furthering understanding of the emotional side of the patient's problems. More attention is indicated at medical meetings and postgraduate conferences to the emotional element in every illness.

The helpful argument that the language of psychiatry may be incomprehensible cannot be effective against the *comprehensible* meaning of psychiatry, namely, full respect for the dignity of all of the human individual. The psychiatrist may be simply described as a physician who trains himself to go further than his fellow physicians in understanding the more complicated patient as a human being in the only way possible, by identifying himself with the patient. Psychiatry may be simply described as a specialty set up in the general practice of medicine by the general practice of medicine to study and clarify the complicated illnesses of the mind. As a practical measure for the cultivation of this insight, we uphold the recommendation that all of our county medical societies consider the value of forming mental hygiene committees.

(Observation reveals that mental hygiene committees are being established throughout our state even by lay groups). For the purpose of respecting the existing need for improved local mental health facilities, it may well serve the best interests of all of our local medical societies to have their own mental hygiene, psychiatric representation.

More than ever it seems that times call for the best kind of mental health guidance. To this end your Committee members are doing all possible to develop a better best.

Respectfully submitted,
John M. Dorsey, M.D., *Chairman*
R. G. Brain, M.D.
F. P. Currier, M.D.
W. W. Dickerson, M.D.
T. J. Heldt, M.D.
H. C. Hill, M.D.
M. H. Hoffman, M.D.
C. G. Jennings, M.D.
R. Kernkamp, M.D.
H. A. Luce, M.D.
F. O. Meister, M.D.
R. A. Morter, M.D.
R. W. Waggoner, M.D.
H. B. Zemmer, M.D.

ANNUAL REPORT OF THE CHILD WELFARE COMMITTEE, 1949-50

The Child Welfare Committee reports one formal meeting up to June first and one meeting of interlocking members of the Committee with the Committee on Fetus and New-Born of the Michigan Branch of the American Academy of Pediatrics.

The formal meeting evaluated the work being done in Michigan relative to the development of sound child health programs on the state and local levels as per the resolution adopted by the AMA Section on Pediatrics at the 1949 meeting.

The Hearing Program was reviewed in detail by the Hearing Consultant of the Michigan State Health Department and is doing excellent work in detecting and correcting remedial defects in school children.

The Visual Program is only two and one-half years old and has already tested 140,000 children for visual defects. Fifteen per cent of these children have been referred to Ophthalmologists for treatment. At the request of the Committee, the Council has appointed a committee of Ophthalmologists as an advisory committee to the State Department of Health's Division on Child Welfare and Maternal Health.

The Committee initiated study of adoption problems in Michigan and of follow-up care of infants and children after discharge from hospitals and recommends that next year's Child Welfare Committee continue this study.

The Committee studied and approved a series of feeding pamphlets prepared by the Nutrition Section of the State Health Department and gave permission for this official approval to appear on the printed pamphlets.

The Committee on Fetus and New-Born of the Michigan Branch of the American Academy of Pediatrics, in conjunction with the State Health Department and the Detroit Department of Health, is making such an intensive study of the problems of prematurity and of diarrhea of the new-born that your Committee considered it unwise to take any formal action on these problems at this time.

Respectfully submitted,
L. Paul Sonda, M.D., *Chairman*
R. J. Albi, M.D.
W. N. Braley, M.D.
Moses Cooperstock, M.D.
Carleton Dean, M.D.
A. E. Heustis, M.D.
K. P. Hodges, M.D.
R. M. Kempton, M.D.
R. J. Mason, M.D.
A. L. Richardson, M.D.
R. E. Simpson, M.D.
J. N. P. Struthers, M.D.
J. E. Webber, M.D.

ANNUAL REPORT OF THE CANCER CONTROL COMMITTEE, 1949-50

The Cancer Control Committee held three meetings during the year, on November 3, 1949, on January 26, 1950, and on April 6, 1950, all in Lansing. Each of the three sub-committees held one meeting during the year.

Distribution of Volume II, *Michigan Cancer Bulletin,* was concluded in December, 1949. Replies to a postcard enclosed with the last mailing numbered 872, an 18 per cent return; only fourteen, or 2 per cent of the replies, were not interested in having the Bulletin continued.

In co-operation with this Committee, the Michigan Department of Health has agreed to procure and distribute to all physicians and hospitals in Michigan *The Cancer Bulletin,* published bi-monthly in Houston, Texas, during the twelve months beginning July 1.

The Cancer Comment page in The Journal, Michigan State Medical Society, has appeared regularly during the year, copy being furnished by the Committee.

The March, 1950, issue of The Journal, Michigan State Medical Society, was designated the Cancer Number. The cover, leading editorial and several of the scientific articles were contributed by or through efforts of the Committee.

Under auspices of this Committee, a Cancer Day program was held on Saturday following the 1949 annual meeting of the Michigan State Medical Society in Grand Rapids. Approximately 100 physicians were in attendance.

The Committee sponsored the first Michigan Cancer Conference in Lansing in October, 1949. To this conference were invited representatives of all statewide health minded organizations as well as all local medical societies and official health departments. The conference was attended by 115 persons. The program consisted of five papers as follows: "The Cancer Problem in Michigan" by A. E. Heustis, M.D., "Programs for Early Detection of Cancer" by A. A. Humphrey, M.D., "The Hillsdale Plan in Action" by A. W. Strom, M.D., "Lay Interest in Cancer" by Mr. Donald E. Johnson, and "Developing a Statewide Cancer Control Program" by Norman F. Miller, M.D. At the luncheon which followed the program, questions were answered by the morning speakers.

Following this conference, each organization in attendance was invited to name a member on an advisory committee to assist the Cancer Control Committee in planning other similar conferences and an extension of the general lay education program regarding cancer.

The second Michigan Cancer Conference has been scheduled for October 18, 1950, at Grand Rapids and is planned along the lines of the first conference.

The Cancer Control Committee has provided speakers for two meetings of the Lenawee County Medical Society, for the Northern Michigan Medical Society, and for a Cancer Day program at Cadillac. Suggestions have been made to other medical societies for speakers on cancer subjects.

All requests for speakers before lay audiences have been filled.

A pilot cancer education program in the high schools of Genesee County has been carried out in co-operation with the Genesee County Chapter of the American Cancer Society and the Genesee County Medical Society. This program consisted of talks at student assemblies of all public and parochial high schools in the county. These talks were given by physicians representing this Committee, the County Medical Society and the Michigan Department of Health. More than 9,000 high school pupils were reached by these talks.

Following these high school meetings, a cancer seminar was held for high school science teachers, school nurses and others interested in school health problems. Five two-hour sessions were held at which there was a full discussion of known facts about the nature, causes, distribution, diagnosis, treatment and prevention of cancer. One session was devoted to a discussion of the clinical aspects of cancer. A gynecologist, surgeon, internist, pathologist and radiologist from the Genesee County Medical Society discussed the part each specialty took in diagnosis and treatment. Each session was attended by approximately fifty people.

The Cancer Control Committee is preparing a cancer manual for use in teaching the subject in high school health classes. This manual is to be used first in preliminary form in a few pilot areas. After careful evaluation by high school science teachers, their criticisms and comments will be incorporated in a permanent edition and will be made available to all Michigan High Schools.

The Cancer control Committee was represented at the Conference on Cancer Detection sponsored by the American Cancer Society and held at Portsmouth, New Hampshire, in September, 1949. Many specialized cancer detection programs were discussed during the three-day session. The Hillsdale Plan for Tumor Detection was explained in detail to the seventy persons present from over the United States. At the conclusion of the conference, it was the consensus that no specialized detection program could meet the examination needs of any community and a resolution was adopted recommending that every physician's office become a cancer detection center for the examination of his own patients.

The Hillsdale Plan is being increasingly recognized as a practical plan for cancer detection. In addition to the counties of Berrien, Clinton, Eaton, Genesee, Hillsdale, Livingston, Kalamazoo, Mason, Oakland, Ogemaw and Washtenaw, listed in this Committee's report for last year, Allegan, Barry, Midland, Ottawa, VanBuren, Wexford and the counties comprising the Northern Michigan Medical Society are giving serious consideration to adoption of the Plan. Several other states have approved the Plan in principle and are working out details of organization in keeping with local conditions.

In Hillsdale County, this detection plan is now in its third year of operation with no abatement of interest of physicians or public and with a continuing high level of the number of examinations made monthly.

Members of the Committee helped plan the program for the Inservice Training Course on Cancer for Public Health Directors which was held at the School of Public Health on May 8, 1950.

In addition to the appropriation from the Michigan State Medical Society, contributions to the Committee's budget have been received from the Michigan Cancer Foundation in Detroit, from thirty-two of the seventy-nine local chapters of the Michigan Division, American Cancer Society, and from the Michigan Department of Health. These contributions are gratefully acknowledged.

The secretary's office has answered many inquiries about the Committee's work and the cancer program in Michigan. Many of these inquiries were from high school students for help in preparing reports on cancer for class room assignments.

Respectfully submitted,

N. F. Miller, M.D., *Chairman*
F. L. Rector, M.D., *Secretary*
F. A. Coller, M.D., *Advisor*
H. M. Bishop, M.D.
D. C. Burns, M.D.
L. A. Campbell, M.D.
E. I. Carr, M.D.
M. A. Darling, M.D.
B. J. Graham, M.D.
A. E. Heustis, M.D.
L. E. Holly, M.D.
R. H. Holmes, M.D.
A. A. Humphrey, M.D.
W. H. Huron, M.D.
W. A. Hyland, M.D.
C. H. Keene, M.D.
D. J. Leithauser, M.D.
H. F. Mattson, M.D.
A. B. McGraw, M.D.
H. L. Miller, M.D.
H. M. Nelson, M.D.
C. A. Payne, M.D.
H. M. Pollard, M.D.
H. W. Porter, M.D.
H. R. Prentice, M.D.
H. L. Sigler, M.D.
H. L. Smith, M.D.

ANNUAL REPORT OF THE COMMITTEE ON INDUSTRIAL HEALTH, 1949-1950

"Michigan Industrial Health Day" held at Ann Arbor on March 29, 1950, co-sponsored by the Michigan Association of Industrial Physicians and Surgeons, the Medical Schools of the University of Michigan and Wayne University, the School of Public Health of the University of Michigan, the Michigan State Medical

Society, and the Division of Industrial Health of the Michigan Health Department was the outstanding contribution of the Committee on Industrial Health during the past year.

This program received wide acceptance manifested by the attendance of industrial health representatives from Washington, Chicago, Toronto and officials of the American Medical Association's Council on Industrial Health and the American Association of Industrial Physicians and Surgeons. A dinner honoring Alfred H. Whittaker, M.D., President of the American Association of Industrial Physicians and Surgeons, climaxed the day's activities.

The following subcommittees were appointed and they have been active in their assignments:

(1) Extramural Postgraduate Courses—the committee to investigate the possibility of introducing industrial medical subjects in the spring and autumn Michigan State Medical Society-University of Michigan extramural postgraduate courses arranged by the Committee on Postgraduate Medical Education.

(2) In-plant meetings with County Medical Societies —this committee to aid in arranging meetings with industrial plants, plant walks, visits to the industrial medical departments, et cetera.

(3) Government Relations—this committee to investigate the economic and medical legal aspects of industrial medicine.

(4) Encourage the appointment of Industrial Health Committees in county medical societies and arrange for speakers on industrial health problems for the various county medical society meetings.

The Michigan State Medical Society, through its Committee on Industrial Health, was represented at the Tenth Annual Congress on Industrial Health in New York in February and the Thirty-Fifth Annual Meeting of the American Association of Industrial Physicians and Surgeons in Chicago in April. Members of the Committee on Industrial Health have given talks on industrial health problems before the Washtenaw and Wayne County Medical Societies, the Detroit Industrial Safety Council and the Congress on Industrial Health.

Respectfully submitted,
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A. L. Brooks, M.D.
W. P. Chester, M.D.
Henry Cook, M.D.
W. A. Dawson, M.D.
H. H. Gay, M.D.
Raymond Hussey, M.D.
O. L. Johnson, M.D.
J. S. Lambie, M.D.
V. S. Laurin, M.D.
J. M. Lynch, M.D.
R. D. Mudd, M.D.
N. W. Scholle, M.D.
H. T. Sethney, M.D.
M. W. Shellman, M.D.
A. H. Whittaker, M.D.
J. L. Zemens, M.D.

ANNUAL REPORT OF COMMITTEE ON IODIZED SALT, 1949-1950

During the past year we have had several meetings with members of the national goiter study group in an attempt to promote the larger use of iodized salt. This group has been working out a plan for an advertising campaign to be used in each state to recall to doctors of medicine and to people the great importance of using iodized salt. Slogans were developed and exhibits presented at some meetings. It has recently been felt that this program is not working out satisfactorily so that the present plan is to attempt to change the Pure Food and Drug Act to prevent the sale of highly refined, iodine-deficient salt for table use. A meeting is to be held in Detroit in July to further act on this plan.

During the year we have again written to the seven Michigan hospitals regarding the number of goiter operations. This is a continuation of the study which the Chairman of this Committee has been carrying on for twenty-five years and will be reported soon.

Respectfully submitted,
R. D. McClure, M.D., *Chairman*
H. A. Towsley, M.D., *Vice Chairman*
B. E. Brush, M.D.
L. W. Gerstner, M.D.
D. E. Lichty, M.D.
R. C. Moehlig, M.D.
G. P. Moore, M.D.
R. L. Waggoner, M.D.

ANNUAL REPORT OF THE SUB-COMMITTEE ON DIABETES CONTROL, 1949-50
(of Geriatrics Committee)

The aim of the Sub-Committee on Diabetes Control is to co-operate with the American Diabetes Association in its Diabetes Detection program. Fifty per cent of the county societies of the state appointed Diabetes Detection Committees. Each of these committees developed an educational program in their respective localities aimed at acquainting the public with the symptoms and seriousness of the disease and the method of its detection. This information was gotten to the public through the press, the radio and public gatherings. A number of the county societies in addition to the educational program organized special detection centers where the public could bring samples of urine for analysis. The results of these tests were reported to the family physician of each individual for interpretation and advice. In some cases, follow-up blood sugars or glucose tolerance tests had to be resorted to by the family physician. The Committee is very grateful for the enthusiastic response on the part of the county societies and their committees and feels that in no small measure the public relations situation in those counties was greatly improved by this effort.

Respectfully submitted,
William M. LeFevre, M.D., *Chairman*
Sidney Adler, M.D.
F. W. Baske, M.D.
J. M. Bauer, M.D.
R. A. Johnson, M.D.
J. D. Littig, M.D.
W. L. Lowrie, Jr., M.D.
R. L. Schaefer, M.D.
G. C. Thosteson, M.D.
S. C. Wiersma, M.D.

ANNUAL REPORT OF COMMITTEE ON DISTRIBUTION OF MEDICAL CARE, 1949-50

The Committee did not hold a meeting during this period. There were no problems turned over to this Committee by the MSMS Secretary for consideration.

During the year it is our opinion that problems of Distribution of Medical Care have been well taken care of by other committees.

Respectfully submitted,
C. W. Colwell, M.D., *Chairman*
R. H. Baker, M.D.
H. F. Dibble, M.D.
B. J. Graham, M.D.
A. D. Hobbs, M.D.
E. B. Miller, M.D.
J. R. Rodger, M.D.
R. A. Sokolov, M.D.

ANNUAL REPORT OF THE PUBLIC RELATIONS COMMITTEE, 1949-50

The over-all Public Relations Program followed the general pattern established in preceding years and was directed and led by the forty-seven members of the Public Relations Committee and the four Public Relations Sub-Committees whose detailed reports follow this report.

(Note: It should be noted that many of the figures listed herein are broken down in detail in the report of the Special Committee on Education.)

Intra-Organizational Activity

Much of our work has been done in close liaison with the Legislative Committee and the Special Committee on Education in a further expansion of the program to speak out for Americanism in medical practice.

As of June 1, 1950 the year 1949-50 has seen more than 2,762,500 separate pieces of literature distributed in implementation of the educational program. The intense drive to establish Speakers Bureaus in nearly every county of Michigan has resulted in more than 1,731 speeches and talks being given to medical and lay audiences.

The letter writing campaign instituted in the first year of the C.A.P. program was continued and re-emphasized with the present total of letters, wires and personal calls to Michigan legislators being more than 105,000. While this total does not indicate a theoretical 100 per cent completion of the "Lists of twenty" it does take into consideration those who have written letters in support of the program of the medical profession. Strong evidence of the value of letters was gained this spring when an MSMS Committee made a trip to visit Michigan lawmakers in Washington.

Co-operation of the Public Relations Committee with other intra-organizational groups may be seen in the following brief paragraphs:

Woman's Auxiliary: The past year has seen the greatest degree of co-operation from this group which today has its highest membership total since it was organized. The members of this organization have been active in the distribution of literature, the securing of resolutions from other groups, the establishment of and maintaining of Speakers Bureaus and many other activities. Their Bulletin, published three times each year, has been another medium for presenting the ways and means for active, effective public relations in the medical profession.

Commission on Health Care: Requests are constantly being received for the brochure "In Planning Your Career" developed in 1948 by this Commission. Michigan distribution of the pamphlet to high schools, colleges, etc., has been undertaken by the Woman's Auxiliary while outstate requests have been stimulated by notices in various bulletins having to do with vocational guidance. To date more than 20,000 copies of this booklet have been distributed.

Committee on Rural Health: The Public Relations Committee worked in close co-operation with the Committee on Rural Health, the Michigan Foundation for Medical and Health Education, Inc. and the Michigan Health Council in the planning, preparation and execution of the Third Annual Michigan Rural Health Conference held last October 28-29 in Grand Rapids, Michigan.

Committee on Rheumatic Fever Control: Considerable aid was given this Committee in the preparation of an intensified program designed to acquaint all MSMS members, their patients and the general public, with the aids and services of this Committee. In addition to news releases and radio programs, an attractive folder was reprinted and copies sent to more than 5,000 doctors with cards indicating the availability of extra copies. To date more than 35,000 copies of this folder have been printed and distributed to lay persons. (See report of Committee on Rheumatic Fever Control.)

The Use of Media

In addition to the public relations activities carried on in co-operation with various Committees and individuals within the Medical Society, a great amount of work has been carried on with lay and health organizations both in and out of Michigan. As a result of this close liaison and co-operation the Public Relations program of the MSMS has gained a greater effectiveness.

Some of the ways in which the Medical Society has made itself and its policies better known may best be illustrated by the following examples of the use made by the Public Relations Committee of the various public relations media:

(Note: The use being made of the following media and uses to which county societies and others may use them were outlined in a series of comprehensive articles in The Journal of the Michigan State Medical Society. The series began with the December 1949 issue and is still running.)

Cinema: The first MSMS film, "Lucky Junior," having completed its first run of Michigan's commercial theaters is now being used extensively in the promotion of smaller lay meetings on the level of P.T.A., Farm Bureau, etc.

"To Your Health," second film dealing with socialized medicine, as produced by the Jam Handy organization is now being shown in Michigan theaters. Indications are that this film will equal the success of the first picture. (See report of Cinema Committee.)

Radio: The "Tell Me, Doctor" daily radio series of the Michigan State Medical Society, the only daily program sponsored by the medical profession in the country, has continued over twenty-five stations in Michigan during the past year. Additionally, it has continued to be used by the states of Oklahoma, Virginia and West Virginia and recently the scripts have been requested by the Dade County Medical Society, Florida.

Individual doctors of medicine and county medical societies also appeared on local stations in guest appearances, discussion and scientific presentations. (See report of Radio Committee.)

Newspapers: The public relationship between the MSMS and the newspapers of Michigan were materially strengthened during the past year. The main reason for this increased understanding was due to a series of ten press dinners held in various sections of the state. (See report of Special Committee on Education.)

Additional co-operation from the press was noted as the numbers of clippings increased.

The advertising schedules of preceding years was curtailed this year due to a desire to hold advertising appropriations in reserve for later use.

Public Speaking: The spoken word as a media of communication received impetus during the year due to a series of seventeen Speakers Conferences held at strategic points throughout the state. A direct result of these dinner meetings was the formation of Speaker Bureaus in most counties for the purpose of supplying speakers for lay and medical meetings. (See report of Special Committee on Education.)

The Speakers Manual, a 108-page compendium of facts and information to aid speakers and speakers bureaus, appeared late in June and was distributed to more than 1,000 key leaders.

Speeches by members of the MSMS were made before several thousand medical and lay groups during the

period while several speeches on the national level were made by Officers of the Society and MSMS representatives.

Publications: The Committee prepared and distributed the pamphlets listed below and made additional distribution of two million pieces of materials ordered from the National Education Campaign of the AMA:

"It's No Bargain"	153,000 copies
"Health Care Quiz"	10,000 copies
"Cartoon Booklet"	27,000 copies
"Speakers Manual"	5,000 copies

In addition to the above there have been 69,635 reprints made of other pamphlets developed by the Michigan State Medical Society as well as distribution of reprints of articles from national publications such as *Reader's Digest, Parade* Magazine, etc.

The P.R. department also contributed articles to several publications as well as monthly articles to THE JOURNAL OF THE MSMS. The article "From Michigan: An Answer to Socialized Medicine?" appearing in *Parade* magazine went to a readership of 12,000,000 persons.

Displays: Several displays were used during the year to tell the story of MSMS. An attractive exhibit was set up for the Annual Session at Grand Rapids and a new display with the "hour glass" theme was used at the March PGI meeting in Detroit.

"The Doctor" posters as prepared by the National Education Campaign of the AMA were again distributed on request with many being used by the druggists of the state.

Several county medical societies took advantage of exhibit space and set up displays on a local level.

The easel cards telling the story of the "Tell Me, Doctor" broadcasts were also sent to doctors in areas where the program was making its first appearance.

The use of the MSMS exhibits at county fairs and exhibitions was promoted through columns of THE JOURNAL with the result that several county societies had displays at their local fairs.

National Organizations: Attendance, participation and co-operation in programs of the American Medical Association, the National Conference on Medical Service, the National Rural Health Conference, the Medical Society Executives Conference and other national groups have been carried out to the fullest extent. On several occasions speakers from the Michigan State Medical Society appeared on national programs, radio forums, convention programs and conference platforms.

Advice and Assistance in Public Relations: The additional work of the Public Relations office and the expansion of the C.A.P. program required retention of an enlarged staff. Two field secretaries and one secretary outstate and five employes in Lansing carried on the work involved in the program.

Wallace-Lindeman, Inc. of Grand Rapids, has continued to serve as advertising counsel with excellent advice and assistance.

The Jam Handy Organization of Detroit and the Capitol Films Organization of East Lansing served well as consultants in visual and auditory aids with the former producing the second MSMS film "To Your Health."

The William L. Hermes Company of Lansing has been invaluable in the mailing and distribution of the millions of pieces of printed materials requested. They have also served well in the capacity of adviser in matters of printing problems and projects.

The long-range public relations program of a few years back has become reality and has merited the confidence of the House of Delegates and The Council by developing effectively in every phase of public relations.

The instructions of the House of Delegates have been carried out, and all actions of the Public Relations Committee have been thoroughly reviewed by the Executive Committee of the Council, which has authorized the expenditure of funds only after exhaustive review.

Respectfully submitted,

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J. F. BEER, M.D.
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ANNUAL REPORT OF THE COMMITTEE ON PUBLIC RELATIONS PUBLICATIONS, 1949-50

The publications developed during the year were discussed and the matter and form of future publications was discussed. The integration of this Committee's work with that of the Special Committee on Education was discussed and plans for further co-operation made. Following is a résumé of the work of the Committee:

1. The Medical Associates brochure, "In Planning Your Career," which appeared last year remains one of the better publications of its kind. Distribution was made to most school libraries in Michigan by members of the Woman's Auxiliary while requests from other states are still being received in the number of approximately twenty-five per week.

Several educational systems have asked for copies and have printed news of its availability in their monthly bulletins and journals.

2. A most complete Speakers Manual was published during June. The booklet contained 108 pages, was attractively bound and the initial press run was 5,000 copies. Since its publication many requests have been

received for additional copies for use in the furtherance of the campaign.

3. A cartoon booklet "Taint Funny," twenty-four pages of cartoons dealing with socialized medicine as well as copy pertinent to this subject and the "Good Citizenship Campaign" of MSMS, was printed and distribution made to all doctors of medicine and interested organizations. The initial press run was 27,000.

4. Several MSMS publications introduced during 1948-49 were still in demand. Recognition was given "It's No Bargain" by the National Women's Press Association as the "finest pamphlet yet produced on the subject." Three states, Connecticut, Pennsylvania and Ohio, have already reprinted it for distribution within their own state while requests for reprinting have been received from others.

"The Country Doctor Answers the Ewing Report" is another publication still being used as a source book on the subject of compulsory health insurance. This booklet has been reprinted five times.

5. Four C.A.P. Bulletins were printed and distributed to the entire membership as were three bulletins for the membership of the Woman's Auxiliary.

6. A series of feature articles for THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY were prepared indicating the extent of and use which can be made of the various media of Public Relations. Another feature article and JOURNAL cover dealt with the over-all problem of good medical public relations.

7. The Committee also made several recommendations regarding types and forms of material currently being used in the "Good Citizenship Campaign." These included a small folder for widespread distribution, posters for retail outlets, desk cards, et cetera.

Respectfully submitted,
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J. E. LIVESAY, M.D.

ANNUAL REPORT OF THE COMMITTEE ON NEWSPAPERS, 1949-50

The Committee on Newspapers formulates the plans for the use of newspapers in the over-all public relations program as well as their use in the special campaigns with which the MSMS concerns itself.

Activities of the Committee included:

1. *Advertisements:* Paid advertising in Michigan newspapers was curtailed during the year due to a decision to place advertising in all United States papers by the National Education Campaign of the American Medical Association. This campaign is expected to give additional support to all the activities engaged in by the MSMS.

Authorization has been granted for the placing of one ad in Michigan papers but has been held up until such time as its publication would bring greatest benefit.

Several county medical societies have embarked upon local advertising campaigns with marked success. These campaigns have been financed by local groups with advice and counsel from the Committee.

2. *Newspapers:* Advance news releases (twelve in number) were prepared and sent to all newspapers (364) and to fifty-four radio stations on the occasion of the MSMS Annual Session and the Michigan Postgraduate Clinical Institute. Clippings received indicate the wide acceptance of the stories.

Aid and assistance was given the Michigan Health Council staff in the preparation of news releases prior to and during the Third Annual Michigan Rural Health Conference.

Advance stories and on-the-spot assistance was provided for the first Annual Michigan Industrial Health Day held in Ann Arbor.

Special releases were prepared on speakers at the various MSMS meetings as well as home town stories on appointments to Committees. Several general releases were made of news items emanating within the MSMS membership.

The naming of "Michigan's Foremost Family Physician for 1949" heralded the appearance of many illustrated stories and articles regarding Dr. John C. Maxwell, Paw Paw.

A survey was made of all Michigan newspapers, daily and weekly, to ascertain the method preferred by individual editors in the receipt of copy and pictorial matter from the MSMS. The survey will be of benefit from the standpoint of economy and effectiveness in that pictures and mats will be sent to those editors desiring them in the form most usable to them.

Another innovation was begun during the past year. The MSMS now periodically supplies all editors with a sheet of "fillers" to be used by the editor as time and space permit. In this manner many small items of health interest and information are used in preference to longer stories on the same subject.

The number of news releases sent out by the MSMS during the year approximates 7,200.

Special emphasis in releases has been given such MSMS programs as the Rheumatic Fever Control program and the facts re Socialized Medicine.

3. *Clippings:* In the belief that "a clipping in the hand is worth two unheard of" the Michigan Press Association and the Central Press Association were again used as clipping services. The success of the news release program is evidenced by the average of more than 450 clippings returned each month. In addition many members of the State Society sent in additional clippings from local papers.

Respectfully submitted,
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J. J. LIGHTBODY, M.D.
H. J. MEIER, M.D.

ANNUAL REPORT OF THE COMMITTEE ON RADIO, 1949-50

The Committee on Radio has had the responsibility for formulating the plans and policies for the utilization of radio time to the best possible advantage. Following is a record of the activities carried out:

1. The "Tell Me, Doctor" program was continued with increasing success during 1949-50 with the following stations being added to the list carrying this popular series since September 1949: WSOO, Sault Ste. Marie; WDMJ, Marquette; WMLN, Mount Clemens; WMIQ, Iron Mountain; WTVB, Coldwater; and WMDN, Midland.

Other stations carrying the program include WJBK, Detroit; WCEN, Mount Pleasant; WHLS, Port Huron; WMRP, Flint; WOAP, Owosso; WHRV, Ann Arbor; WKZO, Kalamazoo; WKLA, Ludington; WATZ, Alpena; WMPC, Lapeer; WELL, Battle Creek; WHDF, Calumet; WHFB, Benton Harbor; WJPD, Ishpeming; WIBM, Jackson; WJIM, Lansing; WATT, Cadillac; WLAV, Grand Rapids; and WFYC, Alma.

This program is also used regularly over four stations in Virginia by the Medical Society of Virginia and over Station WCHS in Charleston, West Virginia. Several radio stations in Oklahoma also make regular use of the

series. Another new addition to the list of outstate users is the Dade County Medical Association, Miami, Florida.

During the year requests for prices, sample scripts and other information on the "Tell Me, Doctor" series have been received from state and county medical societies in Iowa, North Carolina, Ohio, Florida, New York, Wisconsin, New Jersey and Mississippi. International interest in the program has been added by a request for information from All-Canada Radio Facilities, an organization representing many radio stations in Canada.

During the year two milestones were reached in the "Tell Me, Doctor" series; the first was the addition of a second voice to the transcriptions thereby adding additional interest for the listening audience. The second important event of the year in the popular medical series was the recording of the 1,000th consecutive broadcast of the series on May 3, 1950.

Lay interest in the series is evidenced by the fact that approximately 60 per cent of the stations carry the program under commercial sponsorship.

During the past year an attractive easel-type placard was developed and mailed to commercial sponsors and all doctors of medicine within the listening radius of stations carrying the show. The cards indicated name of the sponsor as well as the time and other details of the broadcasts in a particular area.

2. Many special broadcasts were presented from time to time publicizing various activities of the MSMS. Examples were the broadcasts emanating from the MSMS Annual Session in Grand Rapids last September and from the Michigan Rural Health Conference last October. The facilities of WKAR, East Lansing, were also utilized on several occasions.

Special broadcasts by individual doctors of medicine were made throughout the year.

3. Several county medical societies also sponsored and conducted radio programs over local outlets throughout the year. Additionally prepared transcriptions of speeches by national health leaders were made available to all interested persons.

4. News releases are sent to fifty-four radio stations at the same time as to newspapers in order that stories of interest to Michigan residents can both be printed and sent over the airwaves.

Respectfully submitted,

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C. L. Candler, M.D.
W. G. Gamble, Jr., M.D.
W. J. Herrington, M.D.
R. W. Teed, M.D.

ANNUAL REPORT OF THE COMMITTEE ON CINEMA, 1949-50

The Committee on Motion Pictures met on several occasions, the last being May 25, 1950, to determine the plans and policies necessary for the integration of motion pictures into the master plan of public relations. The following progress can be noted:

1. The Michigan State Medical Society's first motion picture venture, "Lucky Junior," has virtually completed its run of commercial theaters within the state. In addition to the commercial run the film has been shown to several hundred groups both within and without the state.

By the end of 1950 it is estimated by the distributing organization that 1,000,000 persons will have seen this initial film.

Requests continue to come into the MSMS office regarding previews and conditions of purchase for the rights for "Lucky Junior." Latest state to screen the picture was Missouri through the Missouri Medical Association.

2. The second MSMS film, "To Your Health," dealing with socialized medicine, made its bow late in 1949. To date the film has been shown in approximately 100 theaters in Michigan as well as to captive audiences outside Michigan.

Additional promotion for the film was gained through production of an attractive illustrated folder describing the merits of the production. The broadside was developed and distributed by the Jam Handy Organization in co-operation with the MSMS.

This film has been offered to all of the state medical societies for lease or purchase with the result that the following states have asked for previews with a view towards possible purchase: Ohio, Vermont, Georgia, Rhode Island, New Hampshire, Oklahoma, North Carolina, South Carolina, New York, California, Kentucky, Alabama and Maryland.

Four states, Oklahoma, North Carolina, South Carolina and New York, have purchased state rights or prints of the film for use within their respective states.

Additionally, "To Your Health" has been screened with commendable results for the National Education staff of the AMA and for the executives of the Associated Medical Care Plans organization.

3. Another project of the Committee has been the development of a series of short educational films designed for showing to medical societies and hospital staff members only.

The production schedule calls for the remainder of these low-budget films to be completed at an early date.

Respectfully submitted,

Arch Walls, M.D., *Chairman*
R. F. Salot, M.D.
A. E. Schiller, M.D.

ANNUAL REPORT OF THE LEGISLATIVE COMMITTEE, 1949-50

The Legislative Committee met on December 15, 1949 and April 13, 1950.

The work of the Committee consisted of reviewing the progress of certain bills through national legislative channels as well as measures introduced or to be introduced in the Michigan Legislature.

Legislation to be introduced by the MSMS in the 1950 Legislature was discussed and plans laid for their introduction.

The Committee also authorized the attendance of the Public Relations Field Secretaries at the 1950 Extra Session for the purpose of becoming acquainted with legislative procedures on the state level.

1. The 1950 Extra Session: This session of the Michigan Legislature opened on March 15, 1950 and adjourned June 20, 1950. During this three-month period 71 bills were introduced with only eight bills and resolutions having to do with medicine and health. The MSMS did not approve any of the bills and resolutions which failed of passage and either recommended or tacitly approved those listed below:

House Concurrent Resolution No. 20: A resolution calling for the appointment of a special committee of the Legislature to negotiate with the Federal Government for the acquisition of Percy Jones Hospital, Battle Creek (providing the Federal Government releases it as a veterans facility) for use as a mental institution.

H. B. 20—Sex Deviate Bill: In amendments to the so-called Goodrich Act the criminal sexual psychopath was redefined to include the insane. The one-year history was excluded and constitutional privileges were not waived. The measure provides for commitment to the state hospital commission for confinement and is limited to those not yet sentenced but under conviction of sexually motivated crime.

Another provision states that "the court shall appoint three psychiatrists qualified by at least five years of ex-

clusivc practice in psychiatric diagnosis and treatment and chosen from a list of not less than six by the Department of Mental Health to make a personal examination. . . ."

S.C.R. 18—Hospital Payments for Crippled and Afflicted Children: Passed on May 11, this resolution provided the appointment of a special Interim Committee of the Legislature to investigate the establishment of an equitable basis for state payment to hospitals for services rendered crippled and afflicted children.

S.J.R. D—Bond Issue: A state bond issue in the amount of 88 millions of dollars for a state mental hospital and training school construction program was passed May 20 and will be voted upon as a referendum by the citizens of Michigan next Autumn.

2. The Legislative Committee expresses appreciation to the intelligent and health minded members of the Michigan Legislature for their courteous consideration of the legislative problems of the medical profession and the fine reception they accorded our representatives during the session.

The Committee also wishes to express its sincere thanks to the members of the medical profession throughout the state who kept their friends in the Senate and House well informed concerning medical legislation.

Respectfully submitted,
L. A. Drolett, M.D., *Chairman*
E. R. Addison, M.D.
O. O. Beck, M.D.
W. A. Chipman, M.D.
G. V. Conover, M.D.
E. F. Ducey, M.D.
D. L. Finch, M.D.
C. B. Gardner, M.D.
T. J. Kane, M.D.
E. D. King, M.D.
O. B. McGillicuddy, M.D.
W. F. Mertaugh, M.D.
H. L. Morris, M.D.
W. E. Nesbitt, M.D.
C. L. A. Oden, M.D.
C. W. Reuter, M.D.
E. W. Schnoor, M.D.
G. W. Slagle, M.D.
J. G. Slevin, M.D.
R. A. Springer, M.D.
Charles Ten Houten, M.D.
F. L. Troost, M.D.
C. E. Umphrey, M.D.
R. V. Walker, M.D.

ANNUAL REPORT OF THE BEAUMONT MEMORIAL COMMITTEE, 1949-50

Again the Committee has what is to us a very unsatisfactory report to make. During the past two years we have been in communication with Professor Emil Lorch, who has continued to carry on his studies concerning the original plans and appearance of the Early House on Mackinac Island. The Chairman discussed these problems with him a number of times this year and we were prepared to embark on a fund-raising project to carry through these plans so as to have a fitting memorial to Beaumont and his great contribution to science.

Again the Chairman made several attempts to get in touch with the Chairman and members of the Mackinac Island State Park Commission, but we report complete failure to do so.

Of course, the Committee cannot carry on alone without the aid of the Commission, and we can only say that we will continue with our efforts with hopes that the Commission may show a greater spirit of interest and co-operation than they have in the past two years.

Respectfully submitted,
Frederick A. Coller, M.D., *Chairman*
J. K. Heckert, M.D.
F. C. Kidner, M.D.
A. W. Lescohier, M.D.
F. C. Mayne, M.D.

ANNUAL REPORT OF THE SCIENTIFIC RADIO COMMITTEE, 1949-50

During the year 1949-50, a total of thirty-four scientific radio programs were prepared by members of the Michigan State Medical Society and of the faculties of the University of Michigan Medical School and Wayne University College of Medicine. These programs have been broadcast over twelve stations in Michigan, and one out-of-state radio station.

Topics for these talks have included the fields of cancer, heart disease, allergy, head injuries, colds, and others that are of interest to the general public. An attempt has been made to co-ordinate the radio broadcasts with special drives of the Michigan State Medical Society. For example, during Cancer Month, two scientific programs were presented relative to cancer; during Diabetes Week, one talk was given concerning diabetes; and likewise, related talks were given during the weeks devoted to Immunization and Rheumatic Fever, et cetera. The Committee as a whole has been most co-operative in obtaining speakers for these topics.

As a result of our committee meeting in December, we are striving to reach more radio stations in the State of Michigan for our scientific medical broadcasts. Professor Waldo Abbott and Mr. Edward Burrows, both of Station WUOM, have been most co-operative in suggesting possible stations to which we could expand, and an endeavor was made to reach the various localities through announcement to the secretary of each county medical society. It is hoped in an ensuing year that more stations will adopt the broadcast, in addition to the present twelve stations.

This year the scientific program will be carried through the summer months as a new innovation, making it a fifty-two week program. It will be greatly appreciated if any members of the State Society will volunteer to aid us in this worthwhile public service program of the Michigan State Medical Society.

Respectfully submitted,
John M. Sheldon, M.D., *Chairman*
R. E. Boucher, M.D.
T. T. Callaghan, M.D.
John H. McMillin, M.D.
Kenneth W. Toothaker, M.D.
H. M. Pollard, M.D.
G. H. Scott, Ph.D.

ANNUAL REPORT OF ADVISORY COMMITTEE TO THE WOMAN'S AUXILIARY, 1949-50

There was one meeting of this Committee. This was a telephone conference—all members were present.

The advice they offered was that the State C.A.P. Committee should furnish funds for the Woman's Auxiliary to carry on their part of the program in fighting Socialism.

Respectfully submitted,
F. D. Johnson, M.D., *Chairman*
C. J. Barone, M.D. (Deceased)
C. W. Oakes, M.D.
C. A. Payne, M.D.
S. R. Russell, M.D.
R. W. Ullrich, M.D.

ANNUAL REPORT OF LIAISON COMMITTEE WITH MICHIGAN STATE MEDICAL ASSISTANTS SOCIETY, 1949-1950

The only activity in which the Committee engaged was to have representatives present at the time the Medical Assistants Society passed upon its Constitution and elected its Officers in September 1949. The duty of those present was chiefly in an advisory capacity, and the Constitution was passed practically as suggested by the Committee for the passing of the Constitution with a few minor changes here and there. We have no further report to make than this.

Respectfully submitted,
E. A. Osius, M.D., *Chairman*
W. D. Barrett, M.D.
C. A. Payne, M.D.
William Bromme, M.D.
W. E. Barstow, M.D.

ANNUAL REPORT OF MSMS ADVISORY COMMITTEE TO THE NATIONAL FOUNDATION FOR INFANTILE PARALYSIS, 1949-50

At the Committee meeting held in December 1949 with representatives of the National Foundation, the Committee recommended that the actions of this Committee as outlined in the Annual Report of 1948-1949 be more widely disseminated and that advisory committees be named by those county societies which had not already done so.

After considerable discussion, additional recommendations were made as follows:

1. That the Advisory Committee review all bills presented for payment by the Foundation.
2. That the Uniform Fee Schedule for Governmental Agencies be used as a guide in determining the medical fee.
3. Set the amount of money to be paid by the local chapter.
4. Review all cases at regular intervals with a view toward shortening the length of hospitalization required.

Motion passed that the National Foundation work with the Michigan Crippled Children Commission in connection with the latter organization's offer to set up a plan of follow-up or out-patient care for polio patients upon their discharge from the hospital.

Respectfully submitted,
Mark F. Osterlin, M.D., *Chairman*
O. O. Beck, M.D.
F. E. Curtis, M.D.
H. B. Fenech, M.D.
N. R. Moore, M.D.
H. H. Stryker, M.D.

ANNUAL REPORT OF COMMITTEE ON INCREASE OF MEDICAL STUDENTS GRADUATED FROM MICHIGAN MEDICAL SCHOOLS, 1949-50.

By planning greater use of facilities available at the University of Michigan Medical School, it is hoped that the incoming class of students will number about 200, a definite increase over the previous class of 150. This will be contingent upon financial support by the legislature.

The State of Michigan has made a grant to the Wayne University College of Medicine to develop plans and working drawings for a new Science Building, which if and when completed will enable an increase from sixty-four to one hundred students per class.

Your Committee feels that it had a primary part in stimulating interest and plans to increase the number of medical graduates from our two medical schools in the State of Michigan.

Respectfully submitted,
E. F. Sladek, M.D., *Chairman*
J. S. DeTar, M.D.
L. Fernald Foster, M.D.

ANNUAL REPORT OF PERMANENT CONFERENCE COMMITTEE (WITH MICHIGAN HOSPITAL ASSOCIATION AND MICHIGAN NURSING CENTER ASSOCIATION), 1949-50

This Committee, consisting of members representing each of the two above named groups and the Michigan State Medical Society, has held quarterly meetings and in addition has met on special call on one occasion in the past year. Much of the discussion of these meetings has dealt with the need for increasing facilities for patient care in hospitals. The present lack of sufficient professional nurses and methods for increasing their numbers have been thoroughly discussed from the standpoint of distribution of the present available supply, increasing the recruiting of new applicants for our nursing schools, and supplementing the supply by the training and employment of more practical nurses, and various other trained attendants.

A proposed bill to replace present licensure laws for nurses and trained attendants was discussed and recommendations made concerning its alteration before presentation to the Legislature.

Careful study of the results of the deliberations and recommendations of the meetings of other groups concerned with this problem has been, and is being carried out. As suggestions and recommendations have arisen they have been reported back to the administrative authorities of each of our parent organizations, which have the authority to act upon them. A detailed study of the report of the "Working Conference on Nursing Service and Education," sponsored by Michigan Hospital Association, October 15, and 16, 1949, is at present being completed and recommended changes will be available in the near future.

Certain difficulties in some localities among nurses, hospital administrators and medical men have been discussed and recommendations made for their resolution.

It is planned to continue quarterly meetings of this Committee for discussion of problems common to the three member organizations.

Respectfully submitted,
Earl G. Merritt, M.D., *Chairman*
C. G. Clippert, M.D.
J. D. Miller, M.D.
Sarah S. Schooten, M.D.
E. M. Vardon, M.D.
J. A. Witter, M.D.

ANNUAL REPORT OF MSMS LIAISON COMMITTEE WITH MICHIGAN STATE PHARMACEUTICAL ASSOCIATION, 1949-50

This Committee held no meetings during the year 1949-50. Several items that would normally come before this Committee have been discussed in the meetings of the Michigan Professional and Health Service Representatives.

Respectfully submitted,
J. D. Miller, M.D., *Chairman*
C. G. Clippert, M.D.
C. W. Colwell, M.D.
E. G. Merritt, M.D.
G. H. Rigterink, M.D.

ANNUAL REPORT OF MSMS LIAISON COMMITTEE WITH MICHIGAN HOSPITAL ASSOCIATION, 1949-50

This Committee met on January 5, 1950 in Lansing, Michigan, at which time problems concerned with hospital licensing, changes in the care of crippled children, and medical licensing for resident physicians were discussed.

Discussion on the problems of the licensing of residents is continuing with the Michigan State Board of Registration in Medicine.

Respectfully submitted,
J. D. Miller, M.D., *Chairman*
E. G. Merritt, M.D.
J. A. Witter, M.D.

ANNUAL REPORT OF THE COMMITTEE ON UNIFORM FEE SCHEDULE FOR GOVERNMENTAL AGENCIES, 1949-50

The House of Delegates, in September 1949, recommended to the Michigan Medical Service that they develop a service contract to cover families whose total income was below $5,000. To this Committee was delegated the problem of developing a suitable fee schedule for the medical-surgical procedures that would be covered in the contract. Every effort was made to contact every member of the Michigan State Medical Society in the development of this fee schedule. Approximately 40 per cent of the Society responded by supplying the necessary information. Something over 60,000 items were received, tabulated, averaged and then finally reviewed by the Committee.

Every single item was reviewed separately with the tabulated and averaged reports on that item. The report on these deliberations has resulted in a fee schedule that when weighted for utilization as of 1949 would result in approximately a 41 per cent increase in the money paid out over the fee schedule for the present $2,500 income limit. This fee schedule has been transmitted to The Council of the Michigan State Medical Society and to Michigan Medical Service. The Committee believes that this fee schedule reflects very accurately the average charges made throughout the State of Michigan for the various procedures enumerated for families whose total income is below $5,000.

Respectfully submitted,
R. L. Novy, M.D., *Chairman*
H. E. Bagley, M.D.
E. C. Baumgarten, M.D.
A. O. Brown, M.D.
A. E. Catherwood, M.D.
Carleton Dean, M. D.
L. S. Fallis, M.D.
Carleton Fox, D.D.S.
C. K. Hasley, M.D.
T. H. Hunt, M.D.
L. W. Hull, M.D.
R. F. Kernkamp, M.D.
M. E. Maun, M.D.
I. S. Schembeck, M.D.
D. C. Somers, M.D.
E. C. Texter, M.D.
C. E. Toshach, M.D.
George VanRhee, M.D.
Frank Van Schoick, M.D.
R. V. Walker, M.D.
Arch Walls, M.D.

HOTEL RESERVATIONS

85th Annual Session
MICHIGAN STATE MEDICAL SOCIETY
Detroit, September 20, 21, 22, 1950

The reservation blank below is for your convenience in making your hotel reservations in Detroit. Please send your application to C. B. Loftus, Front Office Manager, Book-Cadillac Hotel, Detroit, Michigan. Mailing your application now will be of material assistance in securing hotel accommodations.

As very few singles are available, registrants are requested to co-operate with the Committee on Hotels by sharing a room with another registrant.

Commiteee on Hotels,
Michigan State Medical Society
% Book-Cadillac Hotel,
Detroit, Michigan

Please make hotel reservation(s) as indicated below:

.....Single Room(s)
..... Double Room(s) for ..... persons
..... Twin-Bedded Room(s) for ..... persons
Arriving September ..... hour ..... A.M. ..... P.M.
Leaving September ..... hour ..... A.M. ..... P.M.
Hotel of First Choice: .....
Second Choice: .....
Names and addresses of all applicants including person making reservation:

Name	Address	City	State

Date ..... Signature .....

Address ..... City .....

Michigan State Medical Society
Roster 1950

(Special Memberships are indicated as follows: "E" for Emeritus Members; "L" for Life Members; "R" Retired Members; "A" for Associate Members; all others are Active Members)

Allegan County

Brachman, A. P. ..... Allegan
Brown, Lewis F. ..... Otsego
Brunson, Eugene T. ..... Ganges
Burdick, J. G. ..... Allegan
Chase, Walter E. ..... Martin
Corkill, C. C. ..... Douglas
Dickinson, Clyde A. ..... Wayland
Flinn, C. C. ..... (L) Allegan
Goude, A. G. ..... Hopkins
Hudnutt, Orrin D. ..... Plainwell
Johnson, E. B. ..... Allegan
Kromer, Robert A. ..... Wayland
Mahan, James E. ..... Allegan
Medill, Wilbur C. ..... Plainwell
Miller, K. C. ..... Saugatuck
Ramseyer, Gladwin E. ..... Plainwell
Rigterink, G. H. ..... (L) Hamilton
Rummell, Robert J. ..... Fennville
Schneiter, H. E. ..... Allegan
Stuck, Olin H. ..... Otsego
Van Ness, J. H. ..... (L) Allegan
Van Der Kolk, Bert ..... Hopkins
Vaughan, W. R. ..... Plainwell
Wiseman, Bertha C. ..... Allegan

Alpena-Alcona-Presque Isle Counties

Arscott, Edward F. ..... Rogers City
Bunting, John W. ..... Alpena
Burkholder, Harry J. ..... Alpena
Constantine, Aeneas E. ..... Harrisville
Finch, Donald E. ..... Onaway
Foley, Arthur L. ..... Rogers City
Foley, Ernest L. ..... Alpena
Hier, Edward A. ..... Alpena
Hodges, R. W. ..... Atlanta
Jackson, William P. ..... Rogers City
Kessler, Harold ..... Alpena
Leopard, Jack M. ..... Alpena
Nesbitt, Wm. E. ..... Alpena
O'Donnell, Francis J. ..... Alpena
Parmenter, E. S. ..... Rogers City
Purdy, John W. ..... (L) Alpena
Ramsey, Jac A. ..... Alpena
Riker, J. L. ..... Alpena
Rowell, Wilfred J. ..... Alpena
Spens, James E. ..... Alpena
Wagoner, Darwin E. ..... Lincoln
Wienczewski, Theophile W. ..... Alpena

Barry County

Bernard, Prosper G. ..... Delton
Birk, Wilbur R. ..... Hastings
Clarke, Daniel M. ..... Hastings
Finnie, R. G. ..... Hastings
Gwinn, Alexander B. ..... Hastings
Harkness, Robert B. ..... (L) Kennett Square, Pa.
Keller, Guy C. ..... (L) Hastings
Lofdahl, Stewart ..... Nashville
Logan, Wesley G. ..... Hastings
Lund, C. A. E. ..... Middleville
Morris, Edgar T. ..... (L) Nashville
Phelps, Everett L. ..... Hastings
Pryor, R. B. ..... Hastings
Slee, Vergil N. ..... Hastings
Wedel, Herbert S. ..... Hastings

Bay-Arenac-Iosco Counties

Alcorn, Kent A. ..... Bay City
Alcorn, Marshall ..... Bay City
Allen, Arthur D. ..... Bay City
Asline, J. Norris ..... Essexville
Austin, Justis ..... Tawas City
Ballard, W. R. ..... (E) Bay City
Boulton, Arthur O. ..... (E) Gladwin
Brown, George M. ..... Bay City
Chapin, Frederick S. ..... Bay City
Connelly, James C. ..... Bay City
Cook, Hugh K. ..... Bay City
Cosens, Stanley A. ..... Bay City
Crissey, Robert R. ..... Bay City
Criswell, Robert H. ..... Bay City
Dardas, Michael J. ..... Bay City
De Waele, Paul L. ..... Bay City
Dolbee, Malcolm ..... Standish
Drummond, Fred H. ..... Kawkawlin
Dumond, Vanny H. ..... Bay City
Ely, Nina ..... (L) Bay City
Fisher, Robert E. ..... Bay City
Foster, L. Fernald ..... Bay City
Freel, John A. ..... Bay City
Gamble, William G., Jr. ..... Bay City
Groomes, Charles A. ..... Bay City
Grosjean, J. C. ..... (L) Bay City
Gunn, Robert P. ..... Bay City
Hagelshaw, G. L. ..... Bay City
Hess, Charles L. ..... Bay City
Heuser, Harold H. ..... Bay City
Horowitz, S. Franklin ..... Bay City
Huckins, Edward S. ..... Bay City
Huckins, Rodger S. ..... Bay City
Hughes, E. C. ..... (L) Bay City
Husted, F. Pitkin ..... Bay City
Jacoby, Abe H. ..... Bay City
Jens, Otto F. ..... Essexville
Johnson, Orlen J. ..... Bay City
Jones, Culver ..... Bay City
Kessler, Mana ..... Bay City
Kessler, Saba ..... Bay City
Knobloch, Howard T. ..... Bay City
Lambert, Leslie A. ..... East Tawas
Loftin, Robert L. ..... Bay City
McDonnell, Walter R. ..... Pinconning
McEwan, John H. ..... Bay City
MacPhail, Joseph C. ..... Bay City
MacRae, L. Douglas ..... Bay City
Medvezky, Michael J. ..... Bay City
Miller, Edwin C. ..... Bay City
Mitton, Orland W. ..... East Tawas
Moore, George W. ..... (L) Bay City
Moore, Neal R. ..... Bay City
Mosier, Dwight J. ..... Bay City
Pearson, Stanley M. ..... Bay City
Reed, William S. ..... Bay City
Reuter, Clarence W. ..... Bay City
Roberts, Frederick J. ..... Bay City
Shafer, Harold C. ..... Bay City
Sherman, R. N. (R) Bradentou Beach, Fla.
Smith, J. Campbell ..... Bay City
Staley, Hugh O. ..... Omer
Stinson, Walter S. ..... Bay City
Stewart, G. C. ..... Bay City
Tarter, Clyde S. ..... Bay City
Tompkins, Dana A. ..... Pinconning
Tupper, Virgil L. ..... (R) Bay City
Urmston, Paul R. ..... Bay City
Vail, Harry F. ..... Bay City
Warren, E. C. ..... (E) Bay City
Wilcox, James W. ..... Bay City
Wilson, Thomas G. ..... Bay City
Wittwer, E. A. ..... (L) Bay City
Zaremba, Aloysius J. ..... Bay City
Ziobrowski, Frank G. ..... Bay City
Ziliak, A. Lawrence ..... Bay City

Berrien County

Anderson, Bertha ..... Benton Harbor
Anderson, H. B. ..... Watervliet
Bailey, John ..... Benton Harbor
Bliesmer, A. F. ..... St. Joseph
Bronfenbrenner, John ..... Benton Harbor
Brown, F. W. ..... Watervliet
Burrell, H. J. ..... Benton Harbor
Butler William J. ..... St. Joseph
Cawthorne, H. J. ..... Benton Harbor
Coffelt, Carl F. ..... St. Joseph
Conklin, Frederick ..... Berrien Center
Conway, Joseph ..... Watervliet
Conybeare, R. C. ..... Benton Harbor
Cowdery, K. H. ..... St. Joseph
Crowell, Richard C. ..... St. Joseph
Dunnington, Ruel N. ..... Benton Harbor
Eidson, Hazel ..... Berrien Springs
Elliott, J. Colin ..... Buchanan
Emery, Clayton S. ..... St. Joseph
Faber, Michael ..... Benton Harbor
Fattic, G. R., Jr. ..... Niles
Friedman, Morris E. ..... New Buffalo
Frost, Robert J. ..... St. Joseph
Garrett, Evan L. ..... Niles
Gillette, Clarence H. ..... Niles
Harper, Ina M. ..... Benton Harbor
Harrison, L. L. ..... Niles
Hart, Russell T. ..... Niles
Helkie, William .... (E) South Bend, Ind.
Henderson, Fred ..... Niles
Hershey, Noel J. ..... Niles
Holt, Robert E., Jr. ..... Niles
Huff, H. D. ..... Niles
Irgens, Edwin ..... St. Joseph
Kelsell, H. I. ..... St. Joseph
Kennedy, A. Alan ..... Benton Harbor
King, B. B. ..... Benton Harbor
King, Frank A., Jr. ..... Benton Harbor
Kling, H. C. ..... Niles
Landgraf, Robert L. ..... Niles
Lawton, Clare V. ..... Benton Harbor
Leva, John B. ..... Benton Harbor
Lindenfeld, Frederick H. ..... Niles
McNabb, Arthur A. ..... Watervliet
Miller, E. A. ..... Berrien Springs
Mitchell, Carl A. ..... (L) Benton Harbor
Moore, T. Scott ..... Niles
Ozeran, Charles J. ..... Benton Harbor
Polansky, Sanford ..... Benton Harbor
Porter, Charles B. ..... Benton Harbor
Pritchard, Harold M. ..... Niles
Rague, Paul O. ..... Benton Harbor
Reagan, Robert ..... Benton Harbor
Rice, Franklin G. ..... Niles
Richmond, D. M. ..... St. Joseph
Ruth, J. Griswold ..... Benton Harbor
Schairer, Wm. W. ..... Coloma
Sowers, Bouton F. ..... Benton Harbor
Strayer, J. C. ..... Buchanan
Strayer, John W. ..... Niles
Strick, Marvin H. ..... Benton Harbor
Swingle, Alvin J. ..... Benton Harbor
Thorup, Don W. ..... Benton Harbor
Tompkins, C. E. ..... Benton Harbor
Urist, Maurice D. ..... Benton Harbor
Waterson, Roy S. ..... Niles
Westervelt, H. O. ..... Benton Harbor
Winegar, Alvon C. ..... Benton Harbor
Woodford, Hackley E. ..... Benton Harbor

Branch County

Aldrich, Napier S.....Coldwater
Andrews, Frank A.....Coldwater
Bailey, J. E.....Coldwater
Beck, Perry C.....Bronson
Culver, Bert W.....Coldwater
Culver, Dean T.....Bronson
Fraser, R. J.....Coldwater
Freuch, Merle R.....Coldwater
Gomley, Henry C.....Bronson
Johnson, D. B.....Coldwater
Leitch, R. M.....Union City
McLain, R. W.....(L) Battle Creek
Meier, H. J.....Coldwater
Mooi, H. R.....Coldwater
Olmstead, Kenneth L.....Coldwater
Rees, Kendall B.....Coldwater
Rennell, E. J.....Coldwater
Slosser, Paul .....Tekonsha
Thomas, J. A.....Coldwater
Wade, R. L.....Coldwater
Walton, N. J.....Quincy
Weidner, H. R. .....Coldwater

Calhoun County

Albright, Arnold A.....(A) Battle Creek
Amos, Norman H.....Battle Creek
Anderson, Harold E.....Battle Creek
Barden, Stuart P.....Battle Creek
Baribeau, Roy H.....Battle Creek
Becker, Harry F.....Battle Creek
Berwald, Herbert T.....(A) Battle Creek
Beuker, Herman .....Marshall
Bodine, Harold R.....Battle Creek
Bonifer, Philip P.....Battle Creek
Brainard, C. W.....Battle Creek
Campbell, Alice F.....Albion
Campbell, Richard J.....Battle Creek
Capron, Manley J.....Battle Creek
Chandler, Edward M.....(A) Battle Creek
Chynoweth, W. R.....Battle Creek
Cooper, J. E.....(L) Battle Creek
Curry, Robert K.....Homer
Diamante, Paul J.....(A) Battle Creek
Dickson, A. R.....Battle Creek
Dodge, Warren M., Jr.....Battle Creek
Fairbanks, Stephen .....Albion
Finch, D. L.....Battle Creek
Forsyth, J. E.....Albion
Fraser, Robert H.....Battle Creek
Funk, L. D.....Athens
Gething, Joseph W.....(L) Battle Creek
Giddings, A. M.....Battle Creek
Gilfillan, Margery J.....(L) Battle Creek
Gorsline, Clarence S.....(L) Battle Creek
Graubner, F. L.....Marshall
Hansen, E. D.....Battle Creek
Hansen, Harvey C.....Battle Creek
Haughey, Wilfrid .....Battle Creek
Heald, C. W.....(L) Battle Creek
Heinrich, J. F.....Battle Creek
Henderson, Philip M.....Albion
Herzer, Henry A.....(L) Albion
Hibbs, Donald K.....Battle Creek
Hills, C. R.....Battle Creek
Hollands, Robert A.....Battle Creek
Holtom, B. G.....Battle Creek
Hoyt, Aura A.....(L) Battle Creek
Hubly, James W.....Battle Creek
Humphrey, Archie E.....Marshall
Humphrey, Arthur A. .....Battle Creek
Iseman, Joseph W.....(A) Battle Creek
Jeffrey, J. R.....Battle Creek
Jesperson, Lydia .....(L) Battle Creek
Jones, Aubrey H.....(A) Fort Custer
Jones, T. K.....Marshall
Keagle, Leland R.....Battle Creek
Keeler, K. B.....Albion
Kelleher, George T.....Battle Creek
Kimball, A. S., Jr.....(A) Ann Arbor
Kinde, M. R.....Battle Creek
Kingsley, Paul C.....Battle Creek
Knapp, N. E.....Battle Creek
Kolvoord, Theodore .....Battle Creek
La Franche, N. Francis.....Battle Creek
Lam, Francis L.....Battle Creek
Levy, Joseph .....Battle Creek
Lewis, W. B.....Battle Creek
Linn, Frank D.....Albion
Love, James M.....Battle Creek
Lowe, Kenneth H.....Battle Creek
Lowe, Stanley T.....Battle Creek
MacGregor, Archibald E. (L) Battle Creek
McNair, Lawrence N.....Albion
Meister, F. O.....Battle Creek
Melges, Fred J.....Battle Creek
Mercer, C. M.....Battle Creek
Moody, Joseph E.....Battle Creek
Morrison, Donald B.....Battle Creek
Moshier, Bertha.....(R) Battle Creek
Mullenmeister, Hugh F.....Battle Creek
Mustard, Russell L.....Battle Creek
Patrick, Gilbert T.....Battle Creek
Pearson, Donald J.....Battle Creek
Putman, Willard N.....Battle Creek
Robbert, John .....Battle Creek
Robins, Hugh .....Battle Creek
Robinson, A. L.....Burr Oak
Rorich, Wilma Weeks.....Battle Creek
Rosenfeld, J. E. .....Battle Creek
Rowan, Russell C.....Albion
Royer, Clark W.....Battle Creek
Schaeffer, Joseph N.....(A) Battle Creek
Schwartz, Irving R.....Battle Creek
Schwarz, Frank W.....Battle Creek
Sharp, A. D.....Albion
Shipp, Leland P.....Battle Creek
Shellenberger, Herbert M.....Marshall
Sibilsky, A. Clark.....Battle Creek
Simpson, Robert S.....Battle Creek
Slagle, George W.....Battle Creek
Sleight, James D.....Battle Creek
Stadle, Wendell H.....Battle Creek
Stiefel, Richard A.....Battle Creek
Strohmenger, Frank J.....Albion
Swartz, George K.....Battle Creek
Tannenholz, Harold S.....Battle Creek
Taylor, Clifford B. .....Albion
Thompson, Ralph M.....(A) Battle Creek
Upson, W. O.....(L) Oceanside, Calif.
VanderVoort, Wm. V.....(L) Battle Creek
Verity, Lloyd E.....Battle Creek
Walker, Charles S.....Battle Creek
Walters, John F.....Battle Creek
Wells, Paul O.....(A) Battle Creek
Wencke, Carl G.....Battle Creek
Willison, Charles H.....(A) Battle Creek
Winslow, Sherwood B. .....Battle Creek
Worgess, Duane R.....Battle Creek
Yannitelli, S. A.....Battle Creek
Zindler, George A.....Battle Creek

Cass County

Adams, Uriah M.....Marcellus
Britton, George T.....Marcellus
Clary, Rudolph I.....Dowagiac
Everett, Dan W.....Edwardsburg
Loupee, George E.....Dowagiac
Loupee, S. L.....Dowagiac
Pierce, Kenneth C.....Dowagiac
Zwergel, E. H.....Cassopolis

Chippewa-Mackinaw Counties

Bandy, Festus.....Detroit
Blain, James G.....Sault Ste. Marie
Blair, Herbert M.....Sault Ste. Marie
Clausen, Claire H.....Sault Ste. Marie
Cowan, Donald.....Sault Ste. Marie
Finlayson, Donald D.....Sault Ste. Marie
Gilfillan, Edwin O.....Sault Ste. Marie
Goddard, G. B.....Pickford
Goldberg, A. H.....Sault Ste. Marie
Hagele, Marie A.....Sault Ste. Marie
Hamel, Herbert E.....St. Ignace
Harrington, H. M.....Sault Ste. Marie
Howe, Donnell C.....Sault Ste. Marie
Howe, Gertrude E.....Sault Ste. Marie
Mackie, Thomas B.....Sault Ste. Marie
McBryde, Lyman M.....Sault Ste. Marie
Mertaugh, William F.....Sault Ste. Marie
Montgomery, B. T.....Sault Ste. Marie
Rhind, Earl S.....Sault Ste. Marie
Scott, Dwight F.....Sault Ste. Marie
Thompson, T. W.....Newberry
Trapasso, Tony J.....Sault Ste. Marie
Venier, A. G.....Sault Ste. Marie
Wallen, LeRoy J.....Sault Ste. Marie
Willison, C.....(E) Sault Ste. Marie
Yale, I. Victor.....Sault Ste. Marie

Clinton County

Bennett, George W.....Elsie
Cook, Bruno .....Westphalia
Elliott, Bruce R.....Ovid
Fillinger, Wells B.....Ovid
Foo, Charles T.....St. Johns
Frace, Guy H.....(E) St. Johns
Graber, Virgil R.....St. Johns
Henthorn, A. C.....(R) St. Johns
Luton, F. E.....St. Johns
McNamara, J. W.....St. Johns
McWilliams, W. B.....Maple Rapids
Russell, Sherwood .....St. Johns
Slagh, Earl M.....Elsie
Smith, Frank W.....Ovid
Stephenson, Wesley.....St. John
Stoller, Paul F.....St. Johns

Delta-Schoolcraft Counties

Benson, Gilbert W.....Escanaba
Bernier, A. Barroso.....Nahma
Boyce, Donald H.....Escanaba
Brenner, Ervin J.....Manistique
Carlton, Arthur J.....Escanaba
Chenoweth, Nancy R.....
.....(E) Ontario, Canada
Defnet, Harry J.....Escanaba
Dehlin, James R.....Gladstone
Frenn, Nathan J.....Bark River
Fyvie, James H.....Manistique
Groos, Harold Q.....Escanaba
Groos, Louis P. .....Escanaba
Harrison, W. C.....Escanaba
Hult, Otto S. .....Gladstone
Kee, Charles E.....Gladstone
Lemire, Donald F.....Escanaba
Lemire, Wm. A.....Escanaba
Lindquist, N. L.....Escanaba
McInerney, Thomas A.....Escanaba
Miller, Albert H.....Gladstone
Moll, Gustavus W.....(E) Escanaba
Ryde, R. E.....Gladstone
Shaw, George A.....Manistique
Walch, John J.....Escanaba
Wehner, Merle E.....Manistique

Dickinson-Iron Counties

Addison, E. R.....Crystal Falls
Alexander, W. H.....Iron Mountain
Boyce, George H.....Iron Mountain
Browing, James L.....Iron Mountain
Cooper, Charles A.....Stambaugh
Fiedling, William .....Norway
Frederickson, Geron.....Iron Mountain
Haight, Harry H. ..(A) Washington, D.C.
Hayes, Willard N.....Norway
Huron, Willis H.....Iron Mountain
Irvine, Lionel E.....Iron River
Kofmehl, Wm. J.....Stambaugh
McCormack, Edward....Nagara, Wisconsin
McEachran, Hugh D. .....Iron Mountain
Menzies, Clifford .....Iron Mountain
Palm, E. Theodore.....Crystal Falls
Retallack, R. C.....Iron River
Schlitter, R. E.....Kingsford
Schroeder, John M.....Iron Mountain
Smith, Donald R.....Iron Mountain
Steinke, Charles G.....Iron Mountain

Eaton County

Arner, Fred L.....Bellevue
Brown, Byron P.....Charlotte
Carothers, Daniel J.....Charlotte
DeLand, C. L.....Olivet
Engle, Paul .....Olivet
Hannah, Harry W.....Charlotte
Harrod, Gordon R.....Grand Ledge
Hoffer, William E.....Charlotte
Imthan, E. F.....Grand Ledge
Johnson, Robert C.....Charlotte
Meinke, Albert H., Jr.....Eaton Rapids
Myers, Albert W.....Potterville
Sevener, Lester G.....Charlotte
Stucky, G. C.....Charlotte
Van Ark, Bert .....Eaton Rapids
Van Ark, Herman F. .....Eaton Rapids
Whitlock, Stanley C.....Dimondale
Willits, Clayton O.....Charlotte

Genesee County

Adams, Burnell.....Flint
Adams, Chester H.....New York City
Anderson, Harley H. .....Mt. Morris
Andrews, Nelson A. C.....Flushing
Anthony, George E.....Flint
Backus, Glenn R.....Flint
Baird, Winston C.....Flint
Bald, Frederick W.....Flint
Barbour, Fleming A.....Flint
Baske, Franklin W.....Flint
Bateman, L. G.....Flint
Benson, John C., Jr.....Flint
Benson, J. C., Sr.....(L) Flint
Bernstein, Eli N.....Flint
Beyer, Damon P.....Clio
Beyer, George D.....Clio
Biggar, H. R.....Flint
Bishop, D. L.....Flint
Bogart, Leon M.....Flint
Boles, William P.....Flint
Bonathan, Alvin T.....Flint
Bradley, Robert M.....Flint
Brain, R. Gordon .....Flint
Branch, Hira E.....Flint
Brasie, Donald R.....Flint
Briggs, Guy D.....Flint
Bruce, William W.....Swartz Creek
Buchanan, W. Fremont.....Fenton
Burkett, L. V.....Flint
Burnell, Max .....Flint
Chambers, Myrton S.....Flint
Chandler, M. E.....(L) Flint
Charters, J. H.....(E) Flint
Clark, Clifford P.....Flint
Collins, James I.....Flint
Colwell, C. W.....Flint
Connell, John T.....Flint
Conover, George V.....Flint
Conover, McClellan.....Flint
Conover, T. Sidney.....Flint
Cook, Henry ....Flint
Covert, Floyd L.....Gaines
Crane, Harley C.....Flint
Credille, Barney A.....Flint
Curry, George J.....Flint
Curtin, John H.....Flint
Cutler, G. Campbell.....Flint
David, T. George.....Flint
Del Zingro, N.....Davison
Denholm, Nan H.....Flint
Dickstein, Bernard .....Flint
Dimond, Edwin G.....Flint
Dodds, Frederick E.....Flint
Drewyer, Glen .....Flint
Eichhorn, Ernest M. .....Flint
Eickhorst, Thomas .....Flint
Elliott, Hardie B. .....Flint
Ettinger, Ralph D. .....Fenton
Farhat, Maynard M. .....Flint
Fee, Manson G. .....Flint
Finkelstein, Theodore .....Flint
Flynn, Southard T. .....Flint
Foley, Sydney I. .....Flint
Fuller, Harvey T. .....Mt. Morris
Gelenger, Stephen M. .....Flint
Gleason, N. A. .....Flint
Golden, H. Maxwell .....Flint
Goodfellow, B. A. .....(L) Flint
Gorne, Saul S. .....Flint
Griffin, Ernest P., Jr. .....Flint
Grover, H. F. .....Flint
Guile, Gurdon S. .....Flint
Gundry, George L. .....Grand Blanc
Gutow, Isadore .....Flint
Gutow, J. J. .....Flint
Hague, Robert F. .....Flint
Halligan, Raymond S. .....(L) Flint
Hamady, Ruth .....Flint
Hamilton, A. J.....Flint
Harper, Alex W. .....(L) Flint
Harper, Homer .....Flint
Hawkins, James E. .....Flint
Hays, George A. .....Flint
Hiscock, Harold H. .....Flint
Hooper, Kendall .....Flint
Houston, James .....(L) Swartz Creek
Hubbard, Wm. B. .....Flint
Hufton, Wilfred L. .....Flint
Jermstad, Robert J. .....Flint
Johnson, Arthur H. .....Flint
Johnson, Frank D. .....Flint
Jones, Alfon.....Flint
Judd, Alvin .....Flint
Kaleta, Edward .....Flint
Kaufman, L. D. .....Flint
Knapp, William D. .....Flint
Kretchmar, Arthur H. .....Flint
Kurtz, John J. .....Flint
Laird, James I. .....Goodrich
Leach, J. Leonidas .....Flint
Limbach, David R. .....Flint
Livesay, Jackson E. .....Flint
Logan, George W. .....(L) Flushing
MacDuff, R. Bruce .....Flint
MacGregor, Delbert M. .....Flint
Macksood, Joseph A. .....Flint
Marsh, H. LaRue.....Flint*
McArthur, Arthur .....Flint
McGarry, Roy A. .....Flint
McKenna, Oscar W. .....(E) Flint
McLeod, Kenneth W. A. .....Flint
Miller, Loren Eugene .....Flint
Miltich, Anthony J. .....Flint
Moore, Kenneth B. .....Flint
Moore, Wesley P. .....Flint
Morrish, Ray S. .....Flint
Morrison, William H. .....Grand Blanc
Morrissey, V. H. .....Flint
Mosier, Edward C. .....Otisville
Odle, Ira D. .....Flint
O'Neil, C. H. .....(R) Deckerville
Orr, John Walter.....(L) Lake Fenton
Osher, Seymour L. .....Flint
Phillips, Robert L.....Flint
Pfeifer, A. C. .....Mt. Morris
Pratz, Oliver C. .....Flint
Preston, Otto .....Flint
Ragan, Russell E. .....Flint
Randall, Herbert E. .....(E) Flint
Rawlings, J. Mott .....Flint
Reeder, Frank E. .....Flint
Reichard, Oril .....(L) Flint
Reid, Wells C. .....Goodrich
Reynolds, A. J. .....Flint
Richeson, Vern N. .....Flint
Rieth, George F. .....Flint
Roberts, Floyd A. .....Flint
Rulney, Max .....Flint
Rundles, Walter Z. .....Flint
Rynearson, William J. .....Fenton
Sandy, Kenneth R. .....Flint
Scavarda, Charles J. .....Flint
Schiff, B. A. .....Flint
Schreiber, E. Oskar .....Flint
Scott, Robert D. .....Flint
Searles, Karl F. .....Flint
Shantz, Leighton O. .....Flint
Shapiro, Joseph .....Flint
Sheeran, Daniel H. .....Flint
Shipman, Charles W. .....Flint
Sirna, Anthony R. .....Flint
Sleeman, Blythe R. .....Linden
Smith, DeVerne C. .....Flint
Smith, Eugene C. .....Flint
Smith, Maurice J. .....Flint
Sniderman, Benjamin F. .....Flint
Snyder, Charles E. .....Swartz Creek
Sorkin, Morris L. .....Flint
Sorkin, Samuel S. .....Flint
Sparks, Harvey V. .....Flint
Steffe, Ralph S. .....Flint
Steinman, Floyd H. .....Flint
Stephenson, Robert A. .....Flint
Stevenson, William W. .....Flint
Streat, Rudolph W. .....Flint
Stroup, Clayton K. .....Flint
Sutherland, James K. .....Flint
Sutton, George .....Flint
Sutton, Mahlon R. .....Flint
Thompson, Alvin .....Flint
Tofteland, Elmer H. .....Flint
Treat, David L. .....(L) Flint
Trumble, George W. .....(L) Flint
Turner, Merald G. .....Flint
Tuuri, Arthur L. .....Flint
VanGorder, George F. .....Davison
Van Harn, R. S. .....Flint
Vary, Edwin P. .....Flint
Walcott, Carver G. .....Fenton
Ward, Nell M. .....Flint
Ware, Frank .....Flint
Wark, David R. .....Flint
Wentworth, John E. .....Flint
Werness, Inga W. .....Flint
White, Carl H. .....Fenton
White, Herbert T. .....Flint
Williams, William S. .....Flint
Willoughby, Gordon L. .....Flint
Willoughby, Leslie L. .....(L) Flint
Wills, Thomas N. .....Flint
Winchester, Walter H. .....(L) Flint
Woughter, Harold W. .....Flint
Wright, Donald W. .....Flint
Wyman, J. S. .....Grand Blanc

Gogebic County

Davidson, Donald L. .....Bessemer
Eisele, David C. .....Ironwood
Franck, John R. .....Wakefield
Gingrich, Wayne A. .....Ironwood
Gorilla, Allen C. .....Ironwood
Harrington, Rex R. .....Ironwood
Lieberthal, Maurice J. .....Ironwood
Lieberthal, Paul R. .....Ironwood
Lojacono, Salvatore .....Ironwood
Maccani, Wm. L. .....Ironwood
McEnroe, John E. .....Ironwood
Nezworski, Henry T. .....Ironwood
O'Brien, A. J. .....Ironwood
Pinkerton, Harold .....Ironwood
Stevens, Charles E. .....Ironwood
Tressel, Henry A. .....Wakefield
Wacek, William H. .....Ironwood

Grand Traverse-Leelanau-Benzie Counties

Beall, John G. .....Traverse City
Bolan, Ellis J. .....Suttons Bay
Brownson, Jay J. .....(L) Kingsley
Brownson, Kneale M. .....Traverse City
Bushong, Benjamin B. .....Traverse City
Ellis, Claude I. .....Suttons Bay
Gauntlett, J. W. .....(L) Traverse City
Goodrich, Dwight .....Traverse City
Haberlein, Charles R. .....Traverse City
Hall, James W. .....Traverse City
Hamilton, Earl E. .....Traverse City
Huene, Nevin .....Traverse City
Huston, Russell R. .....Elk Rapids
Hyslop, Wm. T. .....Traverse City
Jerome, Jerome T. .....Traverse City
Lemen, Charles E. .....Traverse City
Lentz, Robert J. .....Traverse City
Lossman, Robert T. .....Traverse City
Merritt, Harry .....Traverse City
Nickels, M. M. .....Traverse City
Osterhagen, Harold F. .....Traverse City
Osterlin, Mark .....Traverse City
Pike, Donald .....Traverse City
Power, Frank H. .....Traverse City
Salon, Dayton D. .....Traverse City
Sheets, R. Phillip .....Traverse City
Sladek, E. F. .....Traverse City
Stone, Fordyce H. .....Beulah
Swartz, Fred G. .....Traverse City
Thacker, Fred R. .....Frankfort
Thirlby, Edwin L. .....Traverse City
Trautman, Frederick B. .....Frankfort
VanLeuven, B. H. .....Traverse City
Way, Lewis R. .....Traverse City
Weitz, Harry L. .....Traverse City
Wilcox, Paul .....Traverse City
Wilhelm, E. C. .....Traverse City
Zielke, I. H. .....Traverse City
Zimmerman, Joseph G. .....Traverse City

Gratiot-Isabella-Clare Counties

Aldrich, Alfred L. ..... Ithaca
Barstow, Don K. ..... St. Louis
Barstow, W. E. ..... St. Louis
Baskerville, C. M. ..... (E) Mt. Pleasant
Becker, M. G. ..... Edmore
Bergin, Joseph H. ..... Alma
Budge, M. J. ..... Ithaca
Burch, L. J. ..... (E) Mt. Pleasant
Burt, C. E. ..... Ithaca
Davis, Lionel L. ..... Mt. Pleasant
Del Giorno, Thomas ..... Shepard
Dickinson, George J. ..... Mt. Pleasant
Drake, Wilkie M. ..... (L) Breckenridge
DuBois, C. F. ..... Alma
Graham, B. J. ..... Alma
Hall, R. F. ..... Mt. Pleasant
Hammerberg, Kuno ..... Clare
Harrigan, W. L. ..... Mt. Pleasant
Johnson, P. R. ..... Mt. Pleasant
Juhnke, L. W. ..... Mt. Pleasant
Kilborn, H. F. ..... Ithaca
McArthur, Stewart C. ..... Clare
Miller, S. W. ..... Alma
Oldham, E. S. ..... Breckenridge
Palmer, Fred W. ..... Mt. Pleasant
Rottschafer, J. L. ..... Alma
Silvert, Pasche P. ..... Vestaburg
Strange, Russell H. ..... Mt. Pleasant
Waggoner, R. L. ..... St. Louis
Wallman, C. Harry ..... St. Louis
Wickert, L. R. ..... Mt. Pleasant
Wilcox, Rex A. ..... Alma
Wilson, Earl C. ..... Harrison
Wolfe, Kenneth P. ..... Alma
Wood, Cornelius B. ..... Mt. Pleasant

Hillsdale County

Bates, Morton P. ..... Hillsdale
Davis, L. A. ..... Camden
Day, Luther W. ..... Jonesville
Franke, Armin ..... Hillsdale
Hanke, George R. ..... Osseo
Hodge, C. L. ..... Reading
Hughes, Henry F. ..... (L) Hillsdale
Kline, Fred D. ..... Litchfield
MacNeal, John ..... Hillsdale
Martindale, E. A. ..... (L) Hillsdale
Mattson, H. F. ..... Hillsdale
McFarland, Omer G. ..... North Adams
Miller, Harry C. ..... (L) San Diego, Calif.
Peterson, Carl A. ..... Hillsdale
Sawyer, Walter W. ..... Hillsdale
Stein, Arthur ..... Hillsdale
Strom, Arthur W. ..... Hillsdale
Trapp, Donald ..... Hillsdale
Wiggins, Ira W. ..... Jonesville

Houghton-Baraga-Keeweenaw Counties

Aldrich, Addison B. ..... Houghton
Aldrich, Addison D. ..... Houghton
Aldrich, Leonard C. ..... Houghton
Baumgartner, W. W. ..... Houghton
Bourland, Phillip D. ..... (L) Calumet
Brewington, G. F. ..... (E) Mohawk
Burke, John J. ..... Hubbell
Gregg, W. T. S. ..... (E) Cambridge, Mass.
Hillmer, Raymond E. ..... Painesdale
Hosking, Frederick S. ..... Laurium
Janis, Anton J. ..... Hancock
King, William T. ..... Ahmeek
Kirton, Job R. W. ..... (E) Calumet
Kolb, Frederick E. ..... Calumet
LaBine, Alfred ..... Houghton
Lepisto, Victor E. ..... Laurium
Levin, Simon ..... Houghton
Manthei, W. A. ..... Lake Linden
Murphy, Percy J. ..... Calumet
Quick, James B. ..... (L) Laurium
Roberts, Melvin D. ..... Hancock
Roche, Andrew M. ..... Laurium
Scott, Benton V. D. ..... Chassell
Sloan, Paul S. ..... Houghton
Smith, Charles R. ..... Hancock
Stahr, Harry S. ..... Modesta, Calif.
Stern, Isadore D. ..... Houghton
Whitmore, Ray C. ..... Hancock
Wickliffe, John T. P. ..... Calumet
Winkler, Henry J. ..... L'Anse

Huron County

Bentley, M. D. ..... Sebewaing
Dixon, Ralph C. ..... Pigeon
Gettle, Roy R. ..... Bad Axe
Herrington, Charles ..... Bad Axe
Herrington, Willet J. ..... Bad Axe
Monroe, Duncan J. ..... (L) Elkton
Oakes, C. W. ..... Harbor Beach
Ritsema, John ..... Sebewaing
Scheurer, Clare A. ..... Pigeon
Steinhardt, Edward E. ..... Elkton
Turner, Phillip R. ..... Harbor Beach
Weiss, Arno W. ..... Bad Axe
Whipple, Arno A. ..... Pigeon

Ingham County

Alexander, Reuben G. ..... Lansing
Altland, J. K. ..... Lansing
Asselin, David C. ..... Lansing
Badgley, W. O. ..... Lansing
Baker, Arthur G. ..... Lansing
Bartholomew, Henry S. ..... (R) Harbor Beach
Bauer, Theodore I. ..... Lansing
Behen, William C. ..... Lansing
Bellinger, E. G. ..... Lansing
Bevez, Frank L. ..... Lansing
Black, Charles E. ..... Williamston
Black, Gertrude ..... Williamston
Bobczynski, W. E. ..... East Lansing
Bradford, C. W. ..... Lansing
Breakey, Robert S. ..... Lansing
Briede, Paul C. ..... Lansing
Brown, Fred Jr. ..... Lansing
Brubaker, Earl ..... Lansing
Brucker, Karl B. ..... Lansing
Burhans, R. A. ..... Lansing
Calomeni, Anthony D. ..... Lansing
Carr, Earl I. ..... Lansing
Christian, L. G. ..... Lansing
Clark, William E. ..... Mason
Clarke, Emilie A. ..... Lansing
Clinton, George ..... Mason
Cook, R. J. ..... Lansing
Cope, H. E. ..... Lansing
Corneliuson, Goldie B. ..... Lansing
Cowan, John A. ..... Lansing
Cross, Frank S. ..... Lansing
Cummings, G. D. ..... Lansing
Darling, L. H. ..... Lansing
Dean, Carleton ..... Lansing
De Kleine, William ..... Lansing
DeVries, C. F. ..... Lansing
Doyle, C. P. ..... (E) Laansing
Drolett, Donald J. ..... Lansing
Drolett, Fred ..... Lansing
Drolett, Lawrence ..... Lansing
Dunn, F. C. ..... (L) Lansing
Dunn, F. M. ..... Lansing
Ellis, Bertha ..... (R) West Olive
Ellis, C. W. ..... (L) West Olive
Feeney, Kenneth J. ..... Lansing
Folkers, Leonard M. ..... East Lansing
Fortino, S. P. ..... Lansing
Fosget, Wilbur W. ..... Lansing
Foust, E. H. ..... Lansing
French, Horace L. ..... Lansing
Gardner, C. B. ..... Lansing
Garlinghouse, A. John ..... Lansing
Goldner, Roy E. ..... Lansing
Gould, Marian Iddings ..... Lansing
Hackman, Pearl ..... Lansing
Harris, Herbert W. ..... Lansing
Harrison, W. H. ..... Lansing
Harrold, J. F. ..... Lansing
Hart, L. C. ..... Lansing
Hayford, W. D. ..... Lansing
Heald, Gordon H. ..... East Lansing
Heckert, Frank ..... Lansing
Heckert, J. K. ..... Lansing
Henry, L. L. ..... Lansing
Hermes, E. J. ..... Lansing
Heustis, Albert E. ..... Lansing
Himmelberger, R. J. ..... Lansing
Hodges, Kenneth P. ..... Lansing
Holland, Charles F. ..... East Lansing
Huggett, Clare C. ..... Lansing
Huntley, Fred M. ..... Lansing
Hurth, M. S. ..... Lansing
Isbister, John L. ..... Lansing
Jacob, S. Sprigg ..... East Lansing
Johnson, Kenneth H. ..... Lansing
Jones, Francis, Jr. ..... Lansing
Kahn, David ..... Lansing
Kalmbach, R. E. ..... Lansing
Keim, Cameron ..... Lansing
Kent, Edith Hall ..... Lansing
Kent, Herbert K. ..... Lansing
Kenyon, Fanny H. ..... Lansing
Klunzinger, Willard R. ..... Lansing
Kraft, L. C. ..... Leslie
Lanting, Helen E. ..... East Lansing
Lanting, Roelof ..... Lansing
LeDuc, Don M. ..... Lansing
Leeder, F. S. ..... Lansing
Le Vett, Harry L. ..... Lansing
Loree, Maurice C. ..... Lansing
Lucas, T. A. ..... Lansing
Ludlum, L. C. ..... Lansing
Lynch, John M. ..... Lansing
Marriner, E. F. ..... Holt
Martin, Wayne O. ..... Lansing
McConnell, E. G. ..... (R) Lansing
McCorvie, C. Ray ..... East Lansing
McCoy, Earl M. ..... Grand Ledge
McCrumb, R. R. ..... Lansing
McElmurry, Leland R. ..... Lansing
McGillicuddy, Oliver B. ..... Lansing
McGillicuddy, R. J. ..... Lansing
McIntyre, J. E. ..... Lansing
McNamara, B. E. ..... Lansing
McNamara, William E. ..... Lansing
Meade, Robert ..... Lansing
Meade, William H. ..... Lansing
Mercer, W. E. ..... East Lansing
Meyer, Hugh R. ..... (R) Lansing
Monfort, Robert ..... East Lansing
Morrow, R. J. ..... Lansing
Ochsner, P. J. ..... Lansing
Parker, Earl E. ..... Leslie
Pinkham, R. A. ..... Lansing
Place, Edwin H. ..... Lansing
Ponton, Joseph C. ..... Mason
Poppen, C. J. ..... Lansing
Potter, Earl C. ..... Lansing
Prall, H. J. ..... Lansing
Randall, O. M. ..... Lansing
Rector, Frank L. ..... Ann Arbor
Reynolds, E. E. ..... Williamston
Richards, F. D. ..... Dewitt
Richardson, M. L. ..... Lansing
Robson, Edmund J. ..... Lansing
Rozan, J. S. ..... Lansing
Rozan, M. M. ..... Lansing
Ruhmkorff, R. H. ..... East Lansing
Russell, Claude V. ..... (R) Northport
Rutledge, Samuel ..... Lansing
Sander, John F. ..... East Lansing
Scheidt, R. Rudolph ..... Lansing
Schoff, Charles ..... Williamston
Schultz, Arthur E. ..... East Lansing
Seger, Fred ..... (L) St. Petersburg, Fla.
Sharp, Mahlon ..... Lansing
Shaw, Milton ..... Lansing
Sherman, G. A. ..... Lansing
Sichler, Harper G. ..... Lansing
Silverman, Irving E. ..... Lansing
Smith, Anthony V. ..... Mason
Smith, H. M. ..... Lansing
Snell, D. M. ..... Lansing
Snyder, LeMoyne ..... Lansing
Snyder, Ruth E. ..... East Lansing
Spagnuolo, A. J. ..... Lansing
Spencer, Perry ..... Lansing
Stanka, Andrew G. ..... Grand Ledge
Stanley, Arthur L. ..... East Lansing
Steiner, A. A. ..... Lansing
Steiner, S. D. ..... Lansing
Stiles, Frank ..... Lansing
Strauss, P. C. ..... Lansing
Stringer, C. J. ..... Lansing
Swartz, F. C. ..... Lansing
Tamblyn, F. W. ..... Lansing
Toothaker, K. W. ..... Lansing
Towne, Lawrence C. ..... Lansing
Trescott, Robert F. ..... Lansing

Ingham County (Continued)

Trimby, Robert H, ...Lansing
Troost, F. L. ....Holt
Vander Slice, E. R. ....(L) Lansing
VanderZalm, T. P. ....Lansing
Venier, Joseph ....Lansing
Wadley, Ralph ....Lansing
Walker, Leo W. ....Lansing
Webb, Roy O. ....Okemos
Wellman, John ....Lansing
Wilensky, Thomas ....Lansing
Wiley, Harold W. ....Lansing
Willson, Howard S. ....Lansing
Wilson, Harry A. ....Lansing

Ionia-Montcalm Counties

Anderson, Donald H. ....Portland
Bird, Wm. L. ....Greenville
Bracey, L. E. ....(L) Sheridan
Bunce, E. P. ....Trufant
Bunce, Leo W. ....Trufant
Cook, George Harvey ....Ionia
Cox, T. Jefferson ....Ionia
Dunkin, Lloyd S. ....Greenville
Fleming, J. C. ....Pewamo
Fox, Harold M. ....Portland
Freiswyk, Melvin J. ....Belding
Geib, O. P. ....Carson City
Glerum, John B. ....Greenville
Hansen, Carl M. ....Stanton
Hansen, M. M. ....Greenville
Haskell, Robert H. ....Northville
Hoffs, M. A. ....Lake Odessa
Hollard, A. E. ....Belding
House, Glenn W. ....Greenville
Kelsey, L. E. ....Laakeview
Kopchick, Joseph ....Muir
Lilly, Isaac S. ....Stanton
Marston, L. L. ....Lakeview
McCann, John J. ....Ionia
Michmerhuizen, Robert E. ....Lake Odessa
Peabody, C. H. ....(L) Madison, Wis.
Reid, Harold E. ....Stanton
Rice, Robert E. ....Greenville
Robertson, Perry C. ....Ionia
Seidel, Karl E. ....Ionia
Slagh, Milton E. ....Saranac
Snider, J. D. ....Ionia
Socha, Edmund S. ....Ionia
Swift, E. R. ....(L) Lakeview
Tannheimer, John ....Ionia
VanLoo, J. A. ....Belding
Weaver, Harry B. ....Greenville

Jackson County

Abraham, A. O. ....Hudson
Adams, Ellis W. ....Jackson
Ahronheim, J. H. ....Jackson
Alter, R. H. ....Jackson
Anderson, W. B. ....Jackson
Appel, Saul ....Jackson
Baker, George M. ....Parma
Bartholic, Frank W. ....Homer
Beckwith, Sidney A. ....Stockbridge
Bindshedler, Buell S. ....Jackson
Brashares, Z. A. ....Brooklyn
Bullen, G. Rex ....Jackson
Clarke, Corwin S. ....Jackson
Cochrane, Wayne A. ....(L) Jackson
Cooley, Charles W. ....Jackson
Cooley, Randall M. ....Jackson
Corley, Cecil ....Jackson
Corley, Ennis H. ....Jackson
Cox, Ferdinand ....Jackson
Culver, Guy D. ....Stockbridge
DeMay, Cuthbert E. ....Jackson
DeMay, John D. ....Jackson
Deming, Richard C. ....Jackson
Dengler, Charles R. ....Jackson
Dickman, Harry ....Hudson
Douglas, E. W. ....Jackson
Edmonds, John M. ....Horton
Enders, W. H. ....Jackson
Filip, H. K. ....Jackson
Finch, Russell ....Jackson
Finton, Robert E. ....Jackson
Finton, Walter L. ....Jackson
Foust, W. L. ....Grass Lake
Gibson, Frank J. ....(L) St. Petersburg, Fla.
Greenbaum, Harry ....Jackson
Growt, Bowers H. ....Addison
Habenicht, Hilda ....Jackson
Hackett, Thomas E. ....Jackson
Hackett, Thomas L. ....Jackson
Hanft, Cyril F. ....Springport
Hanna, Roger J. ....Jackson
Hardie, George C. ....Jackson
Harris, Lester J. ....(E) Jackson
Hicks, Glenn C. ....Jackson
Holst, John B. ....Jackson
Holstein, Arthur P. ....Manchester
Huebner, R. J. ....Addison
Huntley, W. B. ....Hudson
Joerin, William A. ....Jackson
Keefer, A. H. ....Concord
Kudner, Don F. ....Jackson
Lake, Edward ....Jackson
Landron, Daniel ....Michigan Center
Leahy, Edward O. ....Jackson
Lenz, Charles R. ....Jackson
Leonard, Clyde A. ....Jackson
Lewis, E. F. ....Jackson
Linden, V. E. ....Jackson
Ludwick, John E. ....Jackson
McGarvey, William E. ....Jackson
McLaughlin, M. J. ....Jackson
McLauthlin, Herbert B. ....Jackson
Meads, Jason B. ....Jackson
Miller, Jack L. ....Jackson
Miller, Samuel L. ....Jackson
Munro, Colin D. ....(E) Jackson
Munro, James E. ....Jackson
Munro, Nathan D. ....Jackson
Murphy, Bernard M. ....Jackson
Newton, Ray E. ....Jackson
Oleksy, Stanley P. ....Jackson
O'Meara, James J. ....Jackson
Otis, Grant L. ....Jackson
Payne, Andrew K. ....Jackson
Porter, Horace W. ....Jackson
Pray, Frank F. ....Jackson
Pray, G. R. ....(L) Jackson
Ransom, F. G. ....Jackson
Rice, John W. ....Jackson
Ries, Richard G. ....Jackson
Riley, Philip A. ....Jackson
Sargent, Leland E. ....Jackson
Sautter, W. A. ....Horton
Schmidt, T. E. ....Jackson
Scott, John A. ....Jackson
Shaeffer, Arthur M. ....Jackson
Shaeffer, L. Dale ....Jackson
Sill, Henry W. ....Jackson
Sirhal, Alfred M. ....Brooklyn
Smith, Erma ....Jackson
Smith, Dean W. ....Jackson
Southwick, W. A. ....Springport
Stewart, L. L. ....Jackson
Stolberg, Carl A. ....Jackson
Stone, Ethon L. ....Jackson
Sugar, Samuel ....Jackson
Susskind, Myron V. ....Jackson
Tate, Cecil E. ....Jackson
Taylor, Ross V. ....Jackson
Thayer, E. A. ....Jackson
Thainer, L. F. ....Jackson
Thompson, Tom ....Jackson
Torwick, E. T. ....Jackson
Townsend, J. W. ....Jackson
Schoick, Frank ....Jackson
Van Schoick, John D. ....Hanover
Van Wagnen, Frederick I. ....Jackson
Vivirski, Edward E. ....Jackson
Wallace, Warren S. ....Jackson
Wholihan, John W. ....Jackson
Wickham, Woodward A. ....Jackson
Wilson, Norman D. ....(L) Jackson
Winter, George E. ....(E) Jackson

Kalamazoo County

Aach, Hugo ....Kalamazoo
Alexander, C. A. ....Kalamazoo
Andersen, Glenn C. ....Kalamazoo
Andrews, Sherman E. ....Kalamazoo
Appel, William ....Kalamazoo
Armstrong, Robert J. ....Kalamazoo
Banner, Lawrence R. ....Kalamazoo
Barak, Herbert G. ....Kalamazoo
Barnabee, James W. ....(L) Kalamazoo
Barrow, Winona M. ....Oshtemo
Barry, M. Leroy ....Kalamazoo
Behan, Gerald W. ....Galesburg
Benjamin, Margaret H. ....Kalamazoo
Bennett, Charles L. ....Kalamazoo
Bennett, Keith F. ....Kalamazoo
Berry, Jerome F. ....Kalamazoo
Betz, Elden G. ....Kalamazoo
Birch, William G. ....Kalamazoo
Bodmer, Harvey C. ....Kalamazoo
Borgman, Wallace ....Kalamazoo
Boys, Charles E. ....Kalamazoo
Breneman, James C. ....Galesburg
Brown, Irmel W. ....Kalamazoo
Burbidge, Earl L. ....Kalamazoo
Burt, Kenneth L. ....Kalamazoo
Chrest, Clarence ....Kalamazoo
Cobb, Horace R. ....Kalamazoo
Conrad, Maynard M. ....Kalamazoo
Cook, Ralph ....Kalamazoo
Cooper, Paul F. ....Kalamazoo
Crane, Warren B. ....Kalamazoo
Crawford, Kenneth L. ....Kalamazoo
Creager, Ray O. ....Kalamazoo
Cretsinger, Francis C. ....Kalamazoo
Dahlstrom, Doris E. ....Kalamazoo
Dana, Robert L. ....Kalamazoo
DeGroat, Albert ....Kalamazoo
Delbert, Stewart G. ....Kalamazoo
DePree, Harold ....Kalamazoo
Dew, Robert R. ....Kalamazoo
DeWitt, Norman L. ....Kalamazoo
Dowd, B. J. ....Kalamazoo
Doyle, Frederick M. ....Kalamazoo
Estill, Don V. ....Kalamazoo
Fast, R. B. ....Kalamazoo
Fath, August F. ....Kalamazoo
Fopeano, John V. ....Kalamazoo
Fulkerson, C. B. ....(L) Kalamazoo
Fuller, Paul M. ....Kalamazoo
Gerstner, Louis W. ....Kalamazoo
Gilding, Joseph P. ....Vicksburg
Goodhue, Lolita ....Kalamazoo
Grant, Frederick E. ....(E) Kalamazoo
Green, William L. ....Kalamazoo
Gregg, U. Sherman ....Kalamazoo
Hammer, John M. ....Kalamazoo
Hanson, Curtis M. ....Kalamazoo
Hayner, Russell A. ....Kalamazoo
Heersma, H. Sidney ....Kalamazoo
Herbert, Walter N. ....Kalamazoo
Hildreth, Ross C. ....Kalamazoo
Hodgman, Albert B. ....Kalamazoo
Hoebeke, William G. ....Kalamazoo
Holder, Charles O. ....Kalamazoo
Howard, R. Grant ....Kalamazoo
Howard, Willard H. ....Kalamazoo
Hubbell, Reader J. ....Kalamazoo
Huyser, William C. ....Kalamazoo
Irwin, William D. ....Kalamazoo
Jackson, Howard C. ....Kalamazoo
Jackson, J. B. ....(L) Kalamazoo
Jennings, Wesley O. ....Kalamazoo
Kavanaugh, Wm. R. ....Kalamazoo
Kilgore, Robert N. ....Kalamazoo
Klerk, William J. ....Kalamazoo
Koestner, Paul A. ....Kalamazoo
Lambert, Rudolph H. ....Kalamazoo
Lavender, Howard C. ....Kalamazoo
Lawrence, James ....Kalamazoo
Light, Richard U. ....Kalamazoo
Light, S. Rudolph ....Kalamazoo
Littig, John D. ....Kalamazoo
Locklin, W. Kaye ....Kalamazoo
MacDonald, Marshall A. ....Kalamazoo
MacGregor, John R. ....Kalamazoo
Machin, Harold A. ....Kalamazoo
Malone, James G. ....Kalamazoo
Margolis, Frederick J. ....Kalamazoo
Marshall, Don ....Kalamazoo
Marshall, William P. ....Kalamazoo
Martens, Irvin J. ....Kalamazoo
McCarthy, Joseph S. ....Kalamazoo
Meyers, Lewis ....Kalamazoo
Moe, Carl R. ....Kalamazoo
Morse, William R. ....Kalamazoo
Morter, Roy A. ....Kalamazoo
Nell, Edward R. ....Kalamazoo
Nibbelink, Benjamin ....Kalamazoo
Patmos, Martin ....Kalamazoo

Kalamazoo County (Continued)

Pearson Edwin O. ....Kalamazoo
Peelen, J. William ....Kalamazoo
Peelen, Matthew ....Kalamazoo
Perry, Clifton W. ....Kalamazoo
Pier, Clarence T. ....Kalamazoo
Pratt, F. A. ....(L) Kalamazoo
Prentice, Hazel R. ....Kalamazoo
Prothro, Winston B. ....Kalamazoo
Pullon, Alton E. ....Kalamazoo
Rasmussen, Leo B. ....Vicksburg
Rigterink, Gerald H. ....Kalamazoo
Rigterink, H. A. ....(L) Kalamazoo
Rockwell, Donald C. ....Kalamazoo
Roberts, Millard S. ....Kalamazoo
Ryan, Frederick C. ....Kalamazoo
Sage, Edward D. ....(L) Kalamazoo
Scholten, D. J. ....Kalamazoo
Scholten, Roger A. ....Kalamazoo
Schrier, Clarence M. ....Kalamazoo
Schrier, Paul G. ....Kalamazoo
Schrier, Thomas ....Comstock
Scott, William A. ....Kalamazoo
Shackleton, William E. ....(R) Kalamazoo
Shook, Ralph W. ....Kalamazoo
Siemsen, Walter J. ....Kalamazoo
Simpson, Bernard W. ....Kalamazoo
Sisk, Wilfred N. ....Kalamazoo
Slatmyer, Karel R. ....Kalamazoo
Sofen, Morris B. ....Kalamazoo
Southworth, Maynard N. ....Schoolcraft
Stiller, Anthony F. ....Kalamazoo
Stryker, Homer H. ....Kalamazoo
Upjohn, E. G. ....Kalamazoo
Upjohn, Lawrence N. ....Kalamazoo
VanderVelde, Kenneth M. ....Kalamazoo
Van Urk, Thomas ....(L) Miami Beach, Fla.
Verhage, Martin D. ....Kalamazoo
Volderauer, John C. ....Kalamazoo
Warnke, Robert D. ....Kalamazoo
Westcott, Leo P. ....Kalamazoo
Wilbur, E. P. ....(E) Kalamazoo
Williamson, Edwin M. ....Kalamazoo
Youngs, A. S. ....(E) Kalamazoo
Youngs, Cyril A. ....Kalamazoo
Zolen, Margaret H. ....Kalamazoo

Kent County

Adams, Frank A. ....Grand Rapids
Aitken, George T. ....Grand Rapids
Alberts, G. Donald ....Grand Rapids
Alfenito, Felix S. ....Grand Rapids
Allen, R. V. ....Grand Rapids
Anderson, Karl A. ....Grand Rapids
Andre, Harvey ....Grand Rapids
Avery, Noyes L. ....Grand Rapids
Baker, Abel J. ....Grand Rapids
Baert, George H. ....(E) Grand Rapids
Ballard, Milner S. ....Grand Rapids
Balyeat, Gordon W. ....Grand Rapids
Beaton, James H. ....Grand Rapids
Beeman, Carl B. ....Grand Rapids
Beets, W. Clarence ....Grand Rapids
Bell, Charles M. ....Grand Rapids
Benjamin, Howard G. ....Grand Rapids
Benson, Roland R. ....Grand Rapids
Bettison, William L. ....(A) Lamont
Beukema, Marenus J. ....Grand Rapids
Billings, Elton P. ....(L) Grand Rapids
Blackburn, Henry M. ....Grand Rapids
Boelkins, Richard C. ....Grand Rapids
Boersma, Donald ....Grand Rapids
Boet, Frank A. ....Grand Rapids
Boet, John T. ....Grand Rapids
Bond, George L. ....(L) Rapid City
Bosch, Leon C. ....Grand Rapids
Botting, A. J. ....Byron Center
Brace, Fred C. ....Grand Rapids
Brayman, Charles W. ..(L) Cedar Springs
Brink, J. Russell ....Grand Rapids
Brook, Jacob D. ....(L) Grandville
Brotherhood, James S. ....Grand Rapids
Browning, E. S. ....Grand Rapids
Bruggers, Lawrence ....(A) Philippine Islands
Buist, S. J. ....Grand Rapids
Bull, Frank L. ....Sparta
Burleson, John S. ....Grand Rapids
Burling, Wesley M. ....Grand Rapidds
Burroughs, Frank M. ....Grandville
Butler, Wm. J. ....Grand Rapids
Byrd, Mary Lou ....Grand Rapids
Campbell, Alexander ....(E) Grand Rapids
Carpenter, Luther C. ....Grand Rapids
Cayce, William ....Grand Rapids
Chamberlain, Louis H. ....(L) Grand Rapids
Chandler, Donald ....Grand Rapids
Clawson, Carroll K. ....Grand Rapids
Claytor, Robert W. ....Grand Rapids
Colvin, Walter G. ....Grand Rapids
Corbus, Burton R. ....(L) Grand Rapids
Crane, Harold D. ....Grand Rapids
Cronick, Anne B. ....Grand Rapids
Currier, F. P. ....Grand Rapids
Dales, Ernest W. ....Grand Rapids
Damstra, Harold J. ....Grand Rapids
Davis, David B. ....Grand Rapids
Dean, Alfred W. ....Grand Rapids
DeBoer, Clarence J. ....Grand Rapids
DeBoer, Guy W. ....Grand Rapids
DeMaagd, Gerald ....Rockford
DeMol, Richard J. ....Grand Rapids
Denham, R. H. ....Grand Rapids
DePree, Isla G. ....Grand Rapids
DePree, Joseph ....Grand Rapids
Deurloo, Henry W. ....Grand Rapids
DeVel, Leon ....Grand Rapids
DeVries, Daniel ....Grand Rapids
Dewar, M. M. ....Grand Rapids
Dewey, Kent A. ....Grand Rapids
DeYoung, Thies ....Sparta
Dick, Mark W. ....Grand Rapids
Diskey, Donald ....Grand Rapids
Docter, Leubert L. ....Grand Rapids
Doezema, Edward R. ....(A) Chicago, Ill.
Doran, Frank ....Grand Rapids
Droste, James C. ....Grand Rapids
DuBois, William J. ....(L) Grand Rapids
Ducey, Edward F. ....Grand Rapids
Duiker, Henry ....Grand Rapids
Dyer, David P. ....Grand Rapids
Eaton, Robert M. ....Grand Rapids
Eggleston, H. R. ....Grand Rapids
Ellis, Michael ....Grand Rapids
Fahlund, George T. R. ....Grand Rapids
Failing, John F. ....Grand Rapids
Farber, Charles E. ....Grand Rapids
Faust, Lawrence W. ....Grand Rapids
Fellows, Kenneth E. ....Grand Rapids
Ferguson, James A. ....Grand Rapids
Ferguson, Lynn A. ....Grand Rapids
Ferrand, Louis G. ....Rockford
Fitts, Ralph L. ....Grand Rapids
Flynn, J. Donald ....Grand Rapids
Fochtman, T. W. ....Sparta
Foshee, J. Clinton ....Grand Rapids
Fralick, E. H. ....Grand Rapids
Frantz, Charles H. ....Grand Rapids
Fuller, E. H. ....Grand Rapids
Fuller, William J. ....East Grand Rapids
Gamm, Kenneth E. ....Grand Rapids
Gibbs, Floyd F. ....Grand Rapids
Gilbert, Ralph H. ....Grand Rapids
Gillett, Frederick S. ....(A) Ann Arbor
Gosling, Robert J. ....(A) Junction City, Kan.
Grant, Lee O. ....Grand Rapids
Grant, Lucile R. ....Grand Rapids
Grass, Edward J. ....Grand Rapids
Gray, Fred B. ....Grand Rapids
Graybiel, George P. ....Caledonia
Griffith, Lucian S. ....Grand Rapids
Haeck, William ....Grand Rapids
Hagerman, D. B. ....Grand Rapids
Hardy, Faith F. ....Grand Rapids
Hayes, Lawrence W., Sr. ....Howard City
Heetderks, Dewey R. ....Grand Rapids
Henry, James, Jr. ....Grand Rapids
Herrick, Ruth ....Grand Rapids
Hill, A. Morgan ....Grand Rapids
Hodgen, John T. ....Grand Rapids
Hoffs, Albertus J. ....Grand Rapids
Holcomb, J. Winslow ....Grand Rapids
Holdsworth, M. J. ....Grand Rapids
Holkeboer, Henry D. ....Grand Rapids
Hollander, Stephen ....Grand Rapids
Hoogerhyde, Jack ....Grand Rapids
Hufford, A. R. ....Grand Rapids
Humphreys, James C. ....Grand Rapids
Hunderman, Edward ....Grand Rapids
Hyland, William A. ....Grand Rapids
Ireland, H. D. ....Grand Rapids
Jack, William W. ....Grand Rapids
Jameson, Fred M. ....Grand Rapids
Jaracz, Walter J. ....Grand Rapids
Jarvis, Charles ....Grand Rapids
Jellema, John F. ....Grand Rapids
Johnston, William L. ....Grand Rapids
Jones, Horace C. ....Grand Rapids
Kay, Jerome ....Grand Rapids
Kelly, Edward F. ....Grand Rapids
Kempter, Albert H. ....Grand Rapids
Kendall, Eugene L. ....Grand Rapids
Klaus, C. D. ....Grand Rapids
Kniskern, Paul W. ....Grand Rapids
Kooistra, Henry P. ....Grand Rapids
Kreulen, Henry J. ....Grand Rapids
Kriekard, P. J. ....(L) Grand Rapids
Laird, Robert G. ....Grand Rapids
Lanning, Nicholas E. ....Grand Rapids
Lentini, Joseph R. ....Grand Rapids
LeRoy, Simeon ....(L) Grand Rapids
Lieffers, Harry ....Grand Rapids
List, Carl F. ....Grand Rapids
Logie, James W. ....Grand Rapids
MacDonell, James A. ....Grand Rapids
MacIntyre, Dugald ....Grand Rapids
Marsh, John P. ....Grand Rapids
Martinus, Martin ....Grand Rapids
Maynard, Mason S. ....Grand Rapids
McCormick, John K. ....Grand Rapids
McDougal, Wm. J. ....Grand Rapids
McDougall, Clarice ....Grand Rapids
McKenna, Joseph L. ....Grand Rapids
McKinley, Leland M. ....Grand Rapids
McRae, John ....Grand Rapids
Meade, Richard H., Jr. ....Grand Rapids
Meeuwsen, Bernard ....Grand Rapids
Mehney, Gayle H. ....Grand Rapids
Miller, J. Duane ....Grand Rapids
Miller, John J. ....Marne
Mitchell, W. B. ....Grand Rapids
Moen, Cornetta G. ....Grand Rapids
Moleski, Stanley ....Grand Rapids
Moll, Arthur M. ....Grand Rapids
Montgomery, John C. ....Grand Rapids
Morey, Edward C. ....Grand Rapids
Mouw, Dirk ....Grand Rapids
Mulder, J. D. ....GrandRapids
Murphy, Miles J. ....Grand Rapids
Nanzig, Reinard P. ....Grand Rapids
Nelson, A. R. ....San Francisco, Calif.
Nickel, Kenneth C. ....East Grand Rapids
Noordewier, Albert ....(L) Grand Rapids
Northouse, Peter B. ....Grand Rapids
Notier, Victor A. ....Grand Rapids
Oliver, Walter W. ....Grand Rapids
Olson, John R. ....Grand Rapids
Osborn, Howard A. ....Grand Rapids
Paalman, Russell J. ....Grand Rapids
Patterson, P. Wilfred ....Grand Rapids
Payne, C. Allen ....Grand Rapids
Pearson, Glenn A. ....Grand Rapids
Pedden, John R., Jr. ....Grand Rapids
Plekker, J. D. ....Grand Rapids
Posthuma, A. E. ....(A) Garnd Rapids
Pott, A. L. ....Grand Rapids
Pyle, Henry J. ....Grand Rapids
Ragsdale, L. V. ....Grand Rapids
Ralph, L. Paul ....Grand Rapids
Rasmussen, Richard A. ....Grand Rapids
Reames, Harold R. ....Grand Rapids
Reed, Torrance ....Grand Rapids
Reus, William F. ....Grand Rapids
Rigterink, John W. ....Grand Rapids
Riley, G. L. ....Grand Rapids
Robb, Charles S. ....Grand Rapids
Roberts, Mortimer E. ....(E) Grand Rapids
Robinson, Harold ....Grand Rapids
Rodgers, William L. ....Grand Rapids
Rosenzweig, Leonard ....Grand Rapids
Roth, Emil M. ....Grand Rapids
Ryan, John A. ....Grand Rapids
Schaubel, Howard J. ....Grand Rapids
Schermerhorn, L. J. ....Grand Rapids
Schnoor, E. W. ....Grand Ropids
Schnute, Louise F. ....Grand Rapids
Schuitema, Donald M. ....Grand Rapids
Scott, William B. ....Grand Rapids
Sculley, Raymond E. ....Grand Rapids
Sevensma, Elisha S. ....(L) Grand Rapids
Sevensma, Eugene S. ....Grand Rapids
Sevey, Leon E. ....Grand Rapids
Shellman, Millard W. ....Grand Rapids
Shepard, B. H. ....Lowell
Sidell, Chester M. ....Grand Rapids
Sidell, Richard H. ....Grand Rapids
Siebers, Bernard H. ....Grand Rapids
Slemmons, Clyde C. ....(L) Grand Rapids
Sluyter, J. S. ....Grand Rapids
Smith, A. B. ....Grand Rapids
Smith, Edwin M. ....Grand Rapids
Smith, Ferris N. ....Grand Rapids
Smith, R. Earle ....Grand Rapids
Smith, Robert B. ....Grand Rapids
Snyder, Clarence H. ....Grand Rapids
Southwick, G. Howard ....Grand Rapids

Kent County (Continued)

Steffenson, Wallace H.....Grand Rapids
Stonehouse, G. G.....Grand Rapids
Stover, Virgil E.....Grand Rapids
Stuart, Gerhardus J.....(L) Grand Rapids
Sugg, Cullen E.....Grand Rapids
Sugiyama, Titsuo.....Grand Rapids
Swenson, H. C.....Grand Rapids
Ten Have, John.....Grand Rapids
Tesseine, Arthur J.....Grand Rapids
Teusink, J. H.....Cedar Springs
Thompson, Athol B.....Grand Rapids
Thompson, Edward C.....Grand Rapids
Thompson, Frank D.....Grand Rapids
Tidey, Marcus B.....Grand Rapids
Tiffany, Joseph C.....Grand Rapids
Torgerson, Wm. R.....Grand Rapids
Truog, C. Peter.....Grand Rapids
Utoff, Carl W. .....Grand Rapids

VanBelois, Harvard J.....Grand Rapids
VanBree, R. S.....Grand Rapids
VandenBerg, Henry J.....Grand Rapids
VanderMeer, Ray.....Grand Rapids
Vander Ploeg, William H. ..Grand Rapids
VanDuine, Henry J.....Grand Rapids
VanNoord, Gelmer A.....Grand Rapids
Van't Hof, Albert.....Grand Rapids
Van Pernis, Paul A.....Grand Rapids
Van Solkema, Andrew.....Grand Rapids
Van Solkema, Arthur.....Grandville
VanWoerkom, Daniel.....Grand Rapids
Van Zwalenburg, Benjamin R.....
Grand Rapids
Veldman, Harold E.....Grand Rapids
Venema, Jay R.....Grand Rapids
VerMeulen, John.....Grand Rapids

Verwys, A. L. Hubert .....Grand Rapids
Vining, Keats K., Jr.....Grand Rapids
Vis, William R.....Grand Rapids
Vyn, Jay D.....Grand Rapids
Webber, Jerome.....Grand Rapids
Weller, Keith E. .....Grand Rapids
Wells, Merrill.....Grand Rapids
Wenger, Aaron V.....Grand Rapids
Wenger, John N.....Coopersville
Whalen, John.....(A) Oceanside, Calif.
Whinery, Joseph B.....(E) Grand Rapids
Whinery, Joseph F.....Grand Rapids
Willits, Paul W.....Grand Rapids
Wilson, William E.....(R) Grand Rapids
Winter, Garrett E.....Grand Rapids
Wright, Thomas B.....Grand Rapids
Wurz, John F.....Grand Rapids
Yegge, J. P. .....Kent City

Lapeer County

Biggs, Robert.....North Branch
Bishop, G. Clare.....Almont
Burley, David H.....(E) Almont
Chapin, Clarence D. .....Columbiaville
Dorland, Clarke.....Lapeer

Doty, James R.....Lapeer
McBride, John R.....Lapeer
Merz, Henry G.....(E) Lapeer
O'Brien, Daniel J.....Lapeer

Rehn, Adolph T.....Lapeer
Smith, Glenn L.....Imlay City
Thomas, J. Orville.....(E) North Branch
Zemmer, Harry B.....Lapeer
Zolliker, Carl R.....Imlay City

Lenawee County

Allen, Russell A.....Adrian
Benz, Carl A.....Adrian
Blair, Thomas H.....Adrian
Blanchard, Lowell E.....Hudson
Blanden, Merwin R.....Tecumseh
Boyd, James W.....Clayton
Claxton, W. T.....Britton
Cogar, Charles W.....Grosse Pointe Farms
Colbath, W. E.....Adrian
Dustin, Richard E.....Tecumseh
Hammel, H. H. .....Tecumseh
Hamilton, John D.....Adrian
Hardy, P. B.....(L) Tecumseh
Harrison, Robert E.....Blissfield
Heffron, Charles H.....Adrian

Heffron, Howard H. .....Adrian
Helzerman, Ralph F.....Tecumseh
Hewes, William H.....Adrian
Hinshaw, Warren V.....Adrian
Hornsby, W. B.....Clinton
Howland, F. A.....(L) Adrian*
Hunter, T. B.....Adrian
Huntley, H. C.....Charleston, W. Va.
Isley, H. E.....Blissfield
Loveland, Horace H.....(E) Tecumseh
Marsh, R. G. B.....Tecumseh
Mast, Wesley H.....Tecumseh
Miller, Perry L.....Adrian
Morden, Esli T.....Adrian

Parker, D. A.....Adrian
Pasternacki, Arthur S.....Adrian
Patmos, Bernard.....Adrian
Purfield, Wm. P.....Manchester
Raabe, E. C.....Morenci
Rogers, John D.....Adrian
Sayre, Philip P.....Onsted
Spalding, I. L.....(E) Hudson
Stark, Emily S.....Adrian
Thompson, John R.....Tecumseh
Tubbs, R. V.....Blissfield
VanDusen, Chad A.....Blissfield
Whitehouse, Keith.....Morenci
Wynn, G. H.....Adrian

Livingston County

Barton, Thomas.....Howell
Duffy, Ray M.....Pinckney
Fidler, Fred W.....Howell
Glenn, Bernard H. .....Fowlerville
Hendren, J. J.....Fowlerville

Hill, Harold C.....Howell
Huntington, Harry G.....Howell
Laboe, Edward W.....Howell
Lieber, Robert W.....Howell
McGregor, A. J.....Brighton
May, Louis Earl.....Fowlerville

Meier, Walter E.....Howell
Nicholas, Mildred V.....Howell
Perry, Florence J. C.....Birmingham
Sigler, Hollis L.....Howell
Walker, Enos G.....Lakeland

Luce County

Campbell, Earl H.....Newberry
Gibson, Robert E.....Newberry
Jones, Archie.....Newberry

Perry, Henry E.....(E) Lakeland, Florida
Purmort, William R., Jr.....Newberry

Surrell, Mathew A.....Newberry
Swanson, George F...Martinsburg, W. Va.

Macomb County

Adler, Morton.....Detroit
Allen, Leroy.....Roseville
Banting, O. Fenton.....Richmond
Barker, John G.....Center Line
Bower, A. B.....Armada
Brady, Milo J.....St. Clair Shores
Bryce, James W.....Centerline
Buckley, Daniel J.....Mt. Clemens
Croman, Joseph M., Jr.....Mt. Clemens
Curlett, James E.....(L) Roseville
Dudzinski, Edmund J.....New Baltimore
Engels, John A.....Richmond
Goldman, B. J.....Mt. Clemens
Heine, Austin W.....Mt. Clemens
Isbey, Edward K.....Centerline
Jewell, James H.....Mt. Clemens
Juliar, Joseph F.....Mt. Clemens

Kane, William J.....Mt. Clemens
Lynch, Russell E.....Centerline
Maguire, A. J.....Utica
Mattes, Max W.....Mt. Clemens
Miller, Sidney S.....East Detroit
Moore, George F.....Mt. Clemens
Mulligan, Philip T.....Mt. Clemens
Parker, B. Morgan.....Utica
Reichman, Joseph J.....Mt. Clemens
Reitzel, Rufus H.....Mt. Clemens
Rickman, L. D.....Mt. Clemens
Rivard, Charles L.....Grosse Pointe Woods
Roth, George E.....Detroit
Rothman, Arthur M. .....East Detroit
Ruedisueli, Clarence A.....Roseville
Salot, Russell F.....Mt. Clemens
Scher, Joseph N. .....Mt. Clemens

Scher, Sydney .....Mt. Clemens
Siegfried, Edward G. .....New Haven
Singer, Nelson.....East Detroit
Smith, Milton C. .....Mt. Clemens
Stone, Elizabeth A. .....Romeo
Stryker, Oscar D. .....Mt. Clemens
Sturm, Fred A. .....St. Clair Shores
Test, Frederick C., II .....Mt. Clemens
Thompson, Alfred A. .....Mt. Clemens
Ullrich, Russell W. .....Mt. Clemens
Weiss, Jack I.....Van Dyke
Wellard, Henry C. .....New Baltimore
Whitley, Alec .....St. Clair Shores
Wilde, M. M. .....Warren
Wiley, D. Bruce .....Utica
Woods, H. B. .....Fraser

Manistee County

Hansen, Ernest C. .....Manistee
Konopa, John F. .....Manistee
Lewis, Lee A. .....(E) Manistee
Miller, Ernest B. .....Manistee

Norconk, Ward H. .....Bear Lake
Oakes, Ellery A. .....Manistee
Ogilvie, Gordon D. .....Manistee

Osborn, Samuel .....Manistee
Ramsdell, Homer A. .....Manistee
Rowe, Robert E. .....Manistee
Switzer, Lars W. .....Manistee

Marquette-Alger Counties

Acocks, J. R. .....Marquette
Amolsch, Arthur L. .....Marquette
Baron, Benzoin C. .....Munising
Bennett, Arthur K. .....Marquette
Bennett, M. C. .....Marquette
Berry, Robert F. .....Marquette
Bertucci, Joseph P. .....Ishpeming
Bolitho, T. B. .....Marquette
Burke, R. A. .....Negaunee
Casler, W. L. .....Marquette
Cooperstock, M. .....Marquette
CorCoran, W. A.....Ishpeming
Drury, Charles P. .....Marquette
Elzinga, Eugene R. .....Marquette

Erickson, Arvid W. .....Ishpeming
Fennig, F. A. .....Marquette
Hirwas, C. L. .....Marquette
Hornbogen, D. P. .....Marquette
Howe, Lloyd W. .....Marquette
Jaedecke, R. G. .....Ishpeming
Keskey, George I. .....Marquette
Knutson, George O. .....Negaunee
Lambert, W. C. .....Marquette
LeGolvan, C. .....Marquette
Lyons, James .....Marquette
McCann, Neal J. .....Marquette
Mudge, William A. .....Negaunee

Narotzky, Archie S. .....Ishpeming
Nicholson, J. B. .....Marquette
Paine, Raymond Lee .....Negaunee
Robbins, Nelson J. .....(L) Negaunee
Schweinsberg, Sara D. .....Marquette
Serbst, Charles A. .....Marquette
Sicotte, Isaiah .....Michigamme
Swinton, A. L. .....Marquette
Tearnan, Raymond A. .....Munising
Van Riper, Paul .....(L) Champion
Waldie, George M. .....Ishpeming
Wickstrom, George B. .....Munising
Williams, R. G. .....Ishpeming

Mason County

Bacon, Herbert G. ..... Scottville
Boldyreff, Ephraim ..... Custer
Carney, John R. ..... Ludington
Carney, Ruth V. C. ..... Ludington
Goulet, Leo J. ..... Ludington
Hoffman, Howard B. ..... Ludington
Leppo, Pearl ..... Ludington
Martin, William S. ..... Ludington
Ostrander, Robert A. ..... Ludington
Paukstis, Charles A. ..... Ludington
Slaybaugh, James C. ..... Ludington

Mecosta-Osceola-Lake Counties

Bruggema, Jacob ..... Evart
Chess, Leo F. ..... Reed City
Franklin, Benjamin L. ..... (L) Remus
Ivkovich, Paul ..... Reed City
Kilmer, David ..... Reed City
Kilmer, Paul B. ..... Reed City
Kowaleski, Edward ..... Remus
Merlo, Frank A. ..... Big Rapids
Miller, Charles S. ..... Big Rapids
Mitchell, H. C. ..... Big Rapids
Nelson, Lorenzo ..... Baldwin
Peck, Louis K. ..... (E) Barryton
Treynor, Thomas P. ..... Big Rapids
Van Auken, Edward A. ..... Big Rapids
White, John A. ..... Big Rapids
Yeo, Gordon H. ..... Big Rapids

Medical Society of North Central Counties

Backe, John C. ..... Gaylord
Boehm, John D. ..... (R) West Branch
Clippert, Clarence G. ..... Grayling
Coulter, Keith D. ..... Gladwin
Egle, Joseph L. ..... Gaylord
Forney, F. A. ..... Gaylord
Gehman, J. R. ..... Fairview
Hasty, Earl ..... West Branch
Hayes, Louis F. ..... Grayling
Henig, B. Elmore ..... Grayling
Hoenig, Andrew L. ..... Mancelona
Jardine, Hugh M. ..... West Branch
Keyport, Claude R. ..... Grayling
Kirker, F. O. ..... Prudenville
Kirker, J. G. ..... Fowler
Libke, Robert ..... Gaylord
Martzowka, M. A. ..... Roscommon
McDowell, Douglas B. ..... West Branch
McKillop, G. L. ..... Gaylord
Peckham, Richard C. ..... Gaylord
Schaiberger, George L. ..... West Branch
Stealy, Stanley A. ..... Grayling
Timreck, Harold ..... Gladwin

Menominee County

Brukardt, Herman R. ..... Menominee
DeWane, Francis J. ..... Menominee
DeWane, James N. ..... Menominee
Flanagan, Clarence B. ..... Menominee
Glickman, L. Grant ..... Menominee
Heidenreich, John R. ..... Daggett
Higley, R. A. ..... Menominee
Jones, William S., Jr. ..... Menominee
Jones, William S., Sr. ..... Menominee
Kaye, John T. ..... Menominee
Kerwell, Karm C. ..... Stephenson
Peterson, Allen R. ..... Daggett
Sawbridge, Edward ..... (E) Stephenson
Sethney, Henry T. ..... Menominee
Towey, John W. ..... Powers
Witmarsh, Thomas R. ..... Stephenson

Midland County

Ballmer, Robert S. ..... Midland
Bernier, J. A. ..... Sanford
Bowsher, Robert E. ..... Midland
Bulmer, Dan J. ..... Midland
Buskirk, Maurice D. ..... Midland
Gay, Harold H. ..... Midland
Gordon, Harold L. ..... Midland
Gronemeyer, William H. ..... Midland
Grewe, Norman C. ..... Midland
Hautau, Emily R. ..... Midland
High, C. V., Jr. ..... Midland
Howe, Irvin M. ..... Midland
Ittner, Martin ..... Midland
Kaasa, Laurin J. ..... Midland
Linseman, Karl W. ..... Midland
MacCallum, Charles ..... Midland
Maynard, W. A. ..... Coleman
Meisel, Edward H. ..... Midland
Pike, Melvin H. ..... Midland
Poznak, Leonard A. ..... Midland
Rice, Robert E. ..... Midland
Sherk, Joseph H. ..... Midland
Towsley, W. D. ..... Midland

Monroe County

Acker, William F. ..... Monroe
Ames, Florence ..... Monroe
Barker, Vincent L. ..... Monroe
Blakey, L. C. ..... Monroe
Bond, W. W. ..... Monroe
Brancheau, L. T. ..... Petersburg
Cigany, Zoltan B. ..... Carleton
Dusseau, S. V. ..... (E) Erie
Ewing, R. T. ..... Monroe
Flanders, J. P. ..... Monroe
Frary, R. A. ..... Monroe
Freud, John W. ..... Monroe
Gelhaus, Wm. J. ..... Monroe
Golinvaux, C. J. ..... Monroe
Heffernan, John F. ..... Carleton
Hensel, Hilda ..... Monroe
Hunter, M. A. ..... Monroe
Johnson, A. Esther ..... Monroe
Kelso, S. Newton, Jr. ..... Monroe
Lammers, Gerald ..... Ida
Landon, Herbert W. ..... (E) Monroe
Long, Edgar C. ..... Monroe
Long, Sara ..... Monroe
Mahoney, T. W. ..... Monroe
McDonald, T. A. ..... Monroe
McGeoch, R. W. ..... Monroe
McMillin, J. H. ..... Monroe
Meck, H. L. ..... Dundee
Newcomer, Sheldon R. ..... Monroe
Parmelee, O. E. ..... Lambertville
Pinkus, Hermann ..... Monroe
Reisig, Albert H. ..... Monroe
Sanger, Emerson J. ..... Monroe
Tomlinson, Ledyard ..... Newport
Van Dyke, Anne E. ..... Monroe
Wagar, Spencer ..... Monroe
Williams, Robert J. ..... Monroe
Williamson, George W. ..... Dundee

Muskegon County

Anderson, A. J. ..... Muskegon
Anderson, Axel W. ..... Lakewood Club
Atkinson, A. L. ..... Muskegon Heights
August, R. V. ..... Muskegon Heights
Barnard, Helen S. ..... Muskegon
Beers, C. W. ..... Muskegon Heights
Benedict, Arthur L. ..... Muskegon
Bloom, C. J. ..... Muskegon
Bolthouse, Robert E. ..... Muskegon Heights
Boyd, D. R. ..... Muskegon
Boyd, Jack L. ..... (A) Grand Rapids
Bradshaw, Park S. ..... Muskegon
Busard, J. Max ..... Muskegon
Chapin, William S. ..... (A) Muskegon Heights
Christophersen, James W. ..... Muskegon
Clapp, Henry W. ..... Muskegon
Clark, Harry L. ..... Muskegon
Closz, Harold F. ..... Muskegon
Cohan, Sol G. ..... Muskegon
Dasler, A. F. ..... Muskegon
Diskin, Frank L. ..... Muskegon
Douglas, Robert J. ..... Muskegon*
Durham, Clarence J. ..... (L) Muskegon
Dykhuizen, Harold D. ..... Muskegon
Ellis, Nicholas J. ..... Muskegon
Emerick, Robert W. ..... Muskegon
Fillingham, Enid ..... Muskegon
Fleischmann, C. B. ..... Muskegon
Fleishman, Norman ..... Muskegon
Gaikema, Everett W. ..... Muskegon
Garber, Frank W., Jr. ..... Muskegon
Gillard, James L. ..... Muskegon
Goltz, Martha H. ..... Montague
Greene, Henry P. ..... Muskegon
Griffith, Robert M. ..... Muskegon
Hagen, William A. ..... Muskegon
Harryman, James E. ..... Muskegon
Hartwell, Shattuck W. ..... Muskegon
Heneveld, Edward H. ..... Muskegon
Heneveld, John ..... Muskegon
Heneveld, Robert G. ..... Muskegon
Holly, Leland E. ..... Muskegon
Holmes, Roy H. ..... Muskegon
Jiroch, John T. ..... Muskegon
Joistad, Arthur H. ..... Muskegon
Kane, Thomas J. ..... Muskegon
Kay, Cecelia S. ..... Muskegon
Keilin, Marie ..... Muskegon
Kerr, Howard J. ..... Muskegon
Lange, Eugene W. ..... Muskegon
Lapham, Landin ..... Whitehall
Lauretti, Emil J. ..... Muskegon
Laurin, Vilda S. ..... Muskegon
LeFevre, Louis ..... Muskegon
LeFevre, William M. ..... Muskegon
Loder, Leonel L. ..... Muskegon
Mandeville, C. B. ..... Muskegon
McNair, John N. ..... Muskegon
Medema, Paul E. ..... Muskegon
Meengs, Marvin B. ..... Muskegon
Miller, Philip L. ..... Muskegon
Mulligan, A. W. ..... Muskegan
Oden, Constantine L. ..... Muskegon
Powers, Lunette ..... (E) Muskegon
Prentice, Edwin W. ..... Muskegon
Price, Leonard ..... Muskegon
Pyle, Henry J. ..... Muskegon
Risk, Robert D. ..... Muskegon
Scholle, Norbert ..... Muskegon Heights
Sears, Richard ..... Muskegon
Shebasta, Emil M. ..... Muskegon
Smith, M. Luther ..... Muskegon
Swartout, W. C. ..... Muskegon
Swenson, Leland L. ..... Muskegon
Teifer, Charles A. ..... Muskegon
Tellman, H. Clay ..... Muskegon
Theime, S. W. ..... Ravenna
Thornton, Eugene S. ..... Muskegon
Toy, Charles M. ..... Muskegon
Tyler, William H. ..... Muskegon
Vanderlaan, John E. ..... Muskegon
Wagenaar, Edward H. ..... Muskegon
White, W. G. ..... Muskegon
Wiersma, Sila C. ..... Muskegon
Wildgen, Bernard C. ..... Muskegon
Wilke, Carl A. ..... Montague
Williams, Edward V. ..... Muskegon Heights
Wilson, P. S. ..... (L) Muskegon

ROSTER

Newaygo County

Cook, J. M. ..... Newaygo
Deur, Theodore R. ..... Grant
Geerlings, Lambert J. ..... Fremont
Geerlings, Ralph W. ..... Fremont
Harris, Dean W. ..... Fremont
Klein, J. Paul ..... Fremont
Masters, Brooker L. ..... Fremont
Moore, Hugh R. ..... Newago
O'Neill, John W. ..... White Cloud
Tompsett, Arthur C. ..... Hesperia

Northern Michigan

Albi, Robert J. ..... Boyne City
Alm, Bernhard T. ..... Petoskey
Barrett, J. L. ..... Petoskey
Blum, Benjamin B. ..... Petoskey
Burns, Dean C. ..... Petoskey
Conkle, G. C. ..... Boyne City
Conti, Joseph B. ..... Petoskey
Conway, William S. ..... Petoskey
Duffie, D. H. ..... Central Lake
Grate, Lawrence E. ..... Charlevoix
Hegener, A. J. ..... Petoskey
Kirk, T. R. ..... Petoskey
Lentini, Nicholas ..... Cheboygan
Lilga, Harris V. ..... Petoskey
Litzenburger, Albert F. ..... Boyne City
Mayne, Frederick C. ..... Cheboygan
McClintock, Robert S. ..... Petoskey
McEvoy, F. J. ..... Harbor Springs
Parks, William H. ..... Petoskey
Rodger, John R. ..... Bellaire
Saltonstall, Gilbert B. ..... Charlevoix
Savory, John ..... East Jordan
Slade, H. G. ..... Cheboygan
Stringham, James R. ..... Cheboygan
Van Dellen, Jerrian ..... East Jordan
Van Heldorf, Harry ..... Detroit
Weeberg, Kathryn ..... Petoskey
Wood, George H. ..... Onaway

Oakland County

Abbott, James A. ..... Pontiac
Abbott, Vernon C. ..... Pontiac
Adams, Frederick M. ..... Birmingham
Arnkoff, Harry ..... Pontiac
Aulie, Hal G. ..... Detroit
Baker, Frederick A. ..... Pontiac
Baker, Robert H. ..... Pontiac
Bannow, Robert J. ..... Pontiac
Barefield, Alwin S. ..... Ferndale
Barker, Howard B. ..... Pontiac
Bauer, Ernest W. ..... Hazel Park
Bauer, Edward G. ..... Pontiac
Beck, Otto O. ..... Birmingham
Beebe, Willard E. ..... Pontiac
Berg, Richard H. ..... Oxford
Berger, Charles J. ..... Royal Oak
Blakeney, James R. ..... Auburn Heights
Blue, Jane ..... Pontiac
Boucher, R. E. ..... Royal Oak
Brooks, A. L. ..... Pontiac
Bullard, R. W. ..... Clarkston
Burgess, Charles M. ..... Ferndale
Burke, Chauncey G. ..... Pontiac
Butler, Samuel A. ..... Pontiac
Calhoun, Ethel T. ..... Birmingham
Campbell, Malcolm D. ..... Royal Oak
Cefai, A. F. ..... Pontiac
Chesney, John G. ..... Birmingham
Christie, J. W. ..... Pontiac
Cobb, Leon F. ..... Pontiac
Cobb, Thomas H. ..... Pontiac
Collins, Edward F. ..... Pontiac
Conrad, C. D. ..... Royal Oak
Cooley, Roy V., Jr. ..... Pontiac
Couche, Henry O. ..... Birmingham
Crissman, H. C. ..... Ferndale
Cudney, Ethan B. ..... Pontiac
Currier, R. Keith ..... Pontiac
Dahlgren, Carl ..... Keego Harbor
Darling, C. G., Jr. ..... Pontiac
De Lawter, Hilbert ..... Rochester
Deutsch, William L. ..... Royal Oak
Dobski, Edwin J. ..... Pontiac
Dunlap, Gregg L. ..... Keego Harbor
Dunn, Lewis E. ..... Berkley
Durocher, N. E. ..... Pontiac
Ekelund, Clifford T. ..... Pontiac
Endress, Zac ..... Pontiac
Farnham, Lucius A. ..... (L) Pontiac
Feicks, William J. ..... Birmingham
Ferris, Ralph G. ..... Birmingham
Fink, L. Jerome ..... Pontiac
Fitzpatrick, Francis ..... Pontiac
Flick, Earl J. ..... Royal Oak
Flick, John R. ..... Royal Oak
Foust, Earl W. ..... Royal Oak
Furlong, Harold A. ..... Pontiac
Gadbaw, Joseph J. ..... Farmington
Gaensbauer, Ferdinand ..... Pontiac
Gariepy, Bernard F. ..... Royal Oak
Gates, Edward M. ..... Pontiac
Gatley, C. R. ..... Pontiac
Gatley, L. Warren ..... Pontiac
Gehringer, Norman F. ..... Pontiac
Geib, Ormond D. ..... Rochester
Gerls, Frank B. ..... Pontiac
Gibson, James C. ..... (E) Milford
Gibson, Wellington C. ..... Milford
Gill, Matthew J. ..... Pontiac
Goode, Norman J. ..... Ferndale
Gradolph, P. L. ..... Ferndale
Grant, William A. ..... (L) Milford
Green, James D. ..... Birmingham
Green, William M. ..... Pontiac
Hackett, Daniel J. ..... Pontiac
Haddock, D. A. ..... Pontiac
Hagman, George ..... Bloomfield Hills
Halsted, Lee H. ..... Farmington
Hammonds, E. E. ..... Birmingham
Harvey, Campbell ..... Pontiac
Hasner, Robert B. ..... Royal Oak
Hassberger, J. B. ..... Birmingham
Hathaway, Clarence L. ..... Lake Orion
Hathaway, William ..... Rochester
Hendren, Owen ..... Pontiac
Henry, Colonel R. ..... Ferndale
Hensley, C. B. ..... Lake Orion
Hershey, Lynn N. ..... Birmingham
Howlett, E. V. ..... (L) Pontiac
Hoyt, Donald F. ..... Pontiac
Hubert, John R. ..... Pontiac
Hurst, Daniel D. ..... Pleasant Ridge
Hutchinson, W. G. ..... (L) Pontiac
Kemp, Felix J. ..... Pontiac
Kemp, W. Lloyd ..... Birmingham
Koehler, William H. ..... Royal Oak
Kuhn, Henry ..... Hazel Park
Lahti, P. T. ..... Royal Oak
La Marche, Norman O. ..... Berkley
Lambie, John S. ..... Birmingham
Laux, Phillip J. ..... Royal Oak
Lawrence, P. J. ..... Pontiac
Lewis, S. M. ..... Ferndale
Ling, Theodore W. ..... Farmington
Lockwood, C. E. ..... Holly
Lowery, A. J. ..... Pontiac
MacKenzie, O. R. ..... Walled Lake
Margrave, Eleanor K. ..... Royal Oak
Markle, John G. ..... Royal Oak
Markley, John M. ..... Pontiac
Mason, Robert J. ..... Birmingham
McConkie, J. P. ..... Birmingham
McNeill, H. H. ..... Pontiac
Mehas, C. P. ..... Pontiac
Meinke, Herman A. ..... Hazel Park
Meng, Ralph H. ..... Rochester
Mercer, Frank A. ..... Pontiac
Merrill, Lionel N. ..... Royal Oak
Mershon, R. B. ..... Walled Lake
Miller, Hazen L. ..... Royal Oak
Miller, Sidney ..... Birmingham
Mitchell, B. M. ..... Pontiac
Moloney, J. Clark ..... Birmingham
Monroe, John D. ..... Pontiac
Moore, Bert ..... Pontiac
Morton, James A. ..... Pontiac
Mumby, Clinton J. ..... Pontiac
Neafie, Charles A. ..... Pontiac
Newcomb, Arnold B. ..... Berkley
Norup, John ..... Berkley
Nosanchuk, Joseph ..... Pontiac
Ohlmacher, A. P. ..... Royal Oak
Olsen, Richard E. ..... Pontiac
Pauli, Theodore H. ..... Pontiac
Payton, Charles F. ..... Royal Oak
Pearce, James F. ..... Royal Oak
Pelletier, Charles J. ..... Hazel Park
Petroff, George N. ..... Pontiac
Porritt, Ross J. ..... Pontiac
Prather, Frank ..... Milford
Prevette, Isaac C. ..... Pontiac
Quarton, Albert E. ..... Royal Oak
Raynale, George P. ..... Birmingham
Reid, Fred T. ..... Clawson
Riggs, Harry L. ..... Pontiac
Riker, Aaron D. ..... Pontiac
Roehm, Harold R. ..... Birmingham
Rowley, Laurie G. ..... Drayton Plains
Rupp, Edson C. ..... Royal Oak
Russell, Vincent P. ..... Royal Oak
Ruva, Joseph ..... Pontiac
St. John, Harold A. ..... Pontiac
Schlecte, Carl ..... Rochester
Schlecte, Eva L. ..... Rochester
Schoenfeld, John B. ..... Birmingham
Schuneman, Howard ..... Ferndale
Seaborn, A. J. ..... Royal Oak
Shadley, Maxwell L. ..... Pontiac
Smith, Carleton A. ..... Pontiac
Smith, Donald S. ..... Pontiac
Smith, Ellen ..... Pontiac
Smith, George E. ..... Royal Oak
Spencer, Lloyd H. ..... Royal Oak
Spoehr, Eugene L. ..... Ferndale
Spohn, Earl W. ..... Royal Oak
Stageman, John C. ..... Pontiac
Stahl, Harold F. ..... Oxford
Stanley, William F. ..... Ferndale
Starker, C. T. ..... Pontiac
Steinberg, Norman ..... Royal Oak
Steffes, Everett M. ..... Berkley
Stolpman, A. K. ..... Birmingham
Stoudt, Louis W. ..... Pontiac
Sutton, Palmer E. ..... Royal Oak
Swickle, Edward F. ..... Clawson
Tauber, Abraham ..... Pontiac
Tolle, Charles B. ..... Pontiac
Tuck, Raymond G. ..... Pontiac
Uloth, Milton J. ..... Ortonville
Van Haltern, H. L. ..... Pontiac
Virga, George M. ..... Huntington Woods
Wagley, P. V. ..... Pontiac
Wagner, Ruth E. ..... Royal Oak
Wake, Douglas L. ..... Royal Oak
Watson, Arthur M. ..... Lake Orion
Watson, Thomas Y. ..... Birmingham
Weisberg, William E. ..... Royal Oak
Whitehouse, John D. ..... Pontiac
Wigent, Ralph D. ..... Pontiac
Williams, John P. ..... Pontiac
Young, Arthur R. ..... Pontiac
Zujko, Alphonse J. ..... Pontiac

Oceana County

Flint, Charles H. ..... Hart
Hasty, Willis A. ..... Shelby
Hayton, A. R. ..... Shelby
Heard, William H. ..... Pentwater
Jensen, Viggo ..... Shelby
Munger, L. P. ..... (E) Hart
Nicholson, John H. ..... (E) Hart
Reetz, Fred A. ..... (A) Shelby
Robinson, Wm. G. ..... Hart
Wood, Merle G. ..... Hart

Ontonagon County

Bender, Jesse L. ..... Mass
Hogue, H. B. ..... Ewen
Rubinfeld, Samuel H. ..... Ontonagon
Strong, W. F. ..... Ontonagon

Ottawa County

Barrett, C. Dale .....(A) Grand Haven
Beernink, E. H. .....Grand Haven
Bloemendaal, D. C. .....Zeeland
Bloemendal, W. B. .....Grand Haven
Boersma, Vern .....Holland
Boone, Cornelius E. .....Zeeland
Bulthuis, Jerry E. .....Jamestown
Clark, Nelson H. .....Holland
Cook, Carl S. .....Holland
DeVries, H. G. .....Holland
DeYoung, Fred W. .....Spring Lake
Groat, Frank L. .....Grand Haven
Hager, Ralph .....Hudsonville
Hamelink, H. M. .....Holland
Harms, H. P. .....Holland
Kearney, J. B. .....Holland
Kemme, Gerrit .....Zeeland
Kitchel, John H. .....Grand Haven
Kitchel, Mary .....Grand Haven
Kools, William C. .....Holland
Leenhouts, Abraham .....(E) Holland
Long, C. E. .....(L) Grand Haven
Moerdyk, William G. .....Holland
Nichols, Rudolph H. .....Holland
Nykamp, Russell .....Zeeland
Rypkema, Willard M. .....Grand Haven
Schalftenaar, R. H. .....Holland
Stobbelaar, Robert .....Grand Haven
Ten Have, Ralph .....Grand Haven
Timmerman, E. C. .....Coopersville
Van Appledorn, Chester J. .....Holland
Van Der Berg, E. .....Holland
Van der Velde, O. .....Holland
Van Duin, J. .....Grand Haven
Van Kolken, P. J. .....Grand Haven
Wells, Kenneth .....Spring Lake
Westrate, William .....Holland
Winter, John K. .....Holland
Winter, William G. .....Holland
Yonkman, Frederick F. ....Madison, N. J.

Saginaw County

Ackerman, Gerald L. .....Saginaw
Alberts, Millard J. .....Saginaw
Anderson, William K. .....Saginaw
Bagley, Ulysses S. .....Saginaw
Berberovich, Thomas F. .....Saginaw
Bishop, H. Mortimer .....Saginaw
Brender, Fred P. .....Frankenmuth
Brock, W. H. .....(L) Saginaw
Bruton, Martin F. .....Saginaw
Bucklin, Robert .....Saginaw
Bullington, Bert M. .....Saginaw
Busch, Frank J. .....Saginaw
Butler, Milton G. .....Saginaw
Button, Aaron C. .....Saginaw
Cady, Frederick J. .....Saginaw
Cambridge, Vernal W. .....Saginaw
Cameron, Allen K. .....Saginaw
Campbell, Lloyd A. .....Saginaw
Catizone, Roy J. .....Merrill
Chisena, Peter R. .....Bridgeport
Clark, Wilbert B. ....(L) Kenmore, N. Y.
Claytor, Archer A. .....Saginaw
Cortopassi, Andre J. .....Saginaw
Cortopassi, Vital E. .....Saginaw
Cory, Charles W. .....Saginaw
Curts, James H. .....Saginaw
Dureksen, Edward C. .....St. Charles
Durman, Donald C. .....Saginaw
Ely, Cecil W. .....Saginaw
Fleschner, Thomas E. .....Birch Run
Friedrick, D. F. .....Frankenmuth
Gage, David P. .....Saginaw
Galsterer, Edwin C. .....Saginaw
Gardner, Joe H. .....Saginaw
Goman, Louis D. .....Saginaw
Grigg, Arthur .....(E) Saginaw
Grigg, Arthur P. .....Saginaw
Hand, Eugene A. .....Saginaw
Harvie, L. C. .....Saginaw
Heavenrich, Robert M. .....Saginaw
Helmkamp, Herbert O. .....Saginaw
Hester, Eustace G. .....Saginaw
Hill, Victor L. .....Saginaw
Hohn, Fred, Jr. .....Saginaw
Howell, Don M. .....Saginaw
Jaenichen, Robert .....Saginaw
James, J. W. .....Saginaw
Jiroch, Ralph S. .....Saginaw
Johnstone, K. J. .....Saginaw
Jordan, Leo A. .....Saginaw
Kemp, J. N. .....(L) Saginaw
Kempton, Rockwell M. .....Saginaw
Kerr, William B. .....Saginaw
Keyes, James T. .....Birch Run
Kickham, Edward F. .....Saginaw
Kleekamp, Herbert G. .....Saginaw
Kolesar, R. C. .....Saginaw
Kowals, Francis V. .....Saginaw
Kretschmer, Thomas V. .....Saginaw
La Porte, L. A. .....Saginaw
Ling, Kenneth C. .....Hemlock
Lohr, Oliver W. .....Saginaw
Longstreet, Martha L. .....(L) Saginaw
Luger, Frederick E. .....Saginaw
Lurie, Robert .....Saginaw
Lyle, Richard C. .....Bridgeport
MacKinnon, Edwin D. .....Saginaw
MacMeekin, James W. .....Saginaw
Manning, John E. .....Saginaw
Markey, Francis L. .....Saginaw
Markey, Joseph P. .....Saginaw
Martzowka, William P. .....Saginaw
Matthews, Harry C. .....Saginaw
Maurer, John A. .....Saginaw
Mayne, Harold E. .....Saginaw
McKinney, Alexander R. .....Saginaw
McLandress, Joshua A. .....(L) Saginaw
Meyer, Henry J. .....(E) Saginaw
Mikan, V. Robert .....Saginaw
Moon, A. R. .....Saginaw
Morgrette, Leonard J. .....Saginaw
Mudd, Richard D. .....Saginaw
Murphy, Albert P. .....Saginaw
Murray, Charles R. .....Saginaw
Murray, Morris J. .....Saginaw
Nelson, Oscar .....Saginaw
Northway, Robert O. .....Saginaw
Novy, Frank O. .....Saginaw
Olson, Carl Porter .....Saginaw
Ostrander, Frank W. .....Freeland
Phillips, Homer A. .....Saginaw
Pietz, Frederick .....Saginaw
Pillsbury, Edward A. .....Frankenmuth
Poole, Frank A. .....(L) Saginaw
Potvin, Clifford D. .....Saginaw
Richards, Ned W. .....Saginaw
Richter, Harry J. .....Saginaw
Roggen, Ivan J. .....Saginaw
Ryan, M. D. .....(E) Saginaw
Ryan, Richard S. .....Saginaw
Sample, John T. .....Saginaw
Sargent, Donald V. .....Saginaw
Schaiberger, Elmer G. .....Saginaw
Schultz, F. R. .....Chesaning
Sharp, Martin C. .....Saginaw
Sheldon, Suel A. .....Saginaw
Siler, Delbert E. .....Saginaw
Skowronski, Casimer A. .....Saginaw
Slack, Walter K. .....Saginaw
Stahly, Edward .....Saginaw
Stander, A. Carl .....Saginaw
Stewart, George W. .....Saginaw
Sulfridge, Hugh L. .....Saginaw
Thompson, Arthur B. .....Saginaw
Tiedke, G. E. .....Saginaw
Topp, Edwin W. .....Saginaw
Toshach, Clarence E. .....Saginaw
Volk, V. K. .....Saginaw
Westlund, Norman .....Saginaw
Wilson, H. Roy .....(R) Saginaw
Wright, Edwin M. .....Saginaw
Yntema, Stuart .....Saginaw

Sanilac County

Bennett, William G. .....Brown City
Blanchard, Ernest W. .....Deckerville
Gift, Weldon A. .....Marlette
Hart, Robert K. .....Croswell
Landy, George R. .....Carsonville
Learmont, H. H. .....Croswell
McCrea, John W. .....Marlette
McGunegle, K. T. .....Sandusky
Seager, M. Cole .....Brown City
Tweedie, G. Evans .....Sandusky
Tweedie, S. Martin .....Sandusky
Webster, John C. .....Mariette

St. Clair County

Banting, Kenneth C. .....Port Huron
Battley, J. C. Sinclair .....Port Huron
Beck, Frank K. .....Port Huron
Beer, Joseph F. .....St. Clair
Benjamin, Clayton C. .....Port Huron
Biggar, R. J. .....Persian Gulf
Borden, Charles L. .....Port Huron
Bottomley, Thomas H. .....Port Huron
Boughner, Walter H. .....Algonac
Bovee, M. E. .....Port Huron
Bowden, William S. .....Marine City
Brush, Howard O. .....Port Huron
Campbell, Mary B. .....Port Huron
Cantwell, John D. .....Port Huron
Carey, Lewis M. ....(R) Edgewater, Fla.
Carney, F. V. .....St. Clair
Cleland, William D. .....Port Huron
Clifford, Robert P. .....St. Clair
Clyne, B. C. .....Yale
Cooper, T. H. .....Port Huron
Dickelmann, Lorin E. .....Port Huron
Fitzgerald, E. W. .....Port Huron
Gilmore, John R. .....Port Huron
Gobeille, Alfred B. .....Algonac
Gunderson, Edward P. .....St. Clair
Hazledine, Herbert J. .....Port Huron
Holcomb, R. J. .....Marine City
Hoyt, Charles N. .....Port Huron
Kahn, Oscar B. .....Capac
Kesl, George M. .....Port Huron
Kimball, F. Bruce .....Port Huron
Krohn, Lawrence H. .....Yale
Lauridsen, James .....Port Huron
Le Galley, Kenneth B. .....Port Huron
Licker, R. R. .....Port Huron
Ludwig, Claude A. .....Port Huron
Ludwig, F. E. .....Port Huron
Martin, Clyde S. .....Port Huron
McColl, D. J. .....(E) Port Huron
McCoy, Leslie F. .....Port Huron
Meredith, E. W. .....Port Huron
Novak, Walter S. .....Port Huron
Patterson, D. Webster .....Port Huron
Pollack, Donald A. .....Port Huron
Sanderson, Joseph L. .....Port Huron
Schaefer, W. A. .....Port Huron
Sites, E. C. .....Port Huron
Thomas, C. F. .....Port Huron
Townley, Charles O. .....Port Huron
Treadgold, Douglas .....Port Huron
Ulmer, Arthur H. .....Port Huron
Vroman, M. E. .....(R) Port Huron
Ware, John R. .....Port Huron
Wass, Henry C. .....St. Clair
Wetzel, John O. .....Port Huron
Wight, William G. .....Yale

St. Joseph County

Berg, Lawrence A. .....Sturgis
Blood, John V. .....Three Rivers
Braham, Wilbur G. .....Sturgis
Brunson, Allen E. .....Sturgis
Cook, Ernest A. .....Centerville
Fiegel, Samuel A. .....Sturgis
Fortner, Roscoe J. .....Three Rivers
Gillespie, Eleanor M. .....Sturgis
Lepard, Olin .....Sturgis
Miller, Charles G. .....Sturgis
O'Dell, C. W. .....Three Rivers
O'Dell, J. H. .....Three Rivers
Olney, Harold E. .....Leonidas
Parrish, Marion F. .....Sturgis
Pennington, Harry C. .....White Pigeon
Penzotti, Stanley C. .....Three Rivers
Porter, C. G. .....Three Rivers
Reed, Fred R. .....Three Rivers
Shaw, George D. .....Three Rivers
Sheldon, John P. .....Sturgis
Slote, Leal K. .....Constantine
Springer, Russell A. .....Centerville
Sweetland, George J. .....Constantine
Tesar, Frank J. .....Centerville
Zimont, Raymond D. .....Constantine

Shiawassee County

Arnold, Alfred L., Jr. ....Owosso
Brown, Richard C. ....Owosso
Brown, Richard J. ....Owosso
Brown, Robert W. ....Owosso
Buzzard, Walter D. ....Chesaning
Chipman, E. M. ....Owosso
Dillon, Thomas J. ....Perry
Graves, James H. ....Owosso
Hambly, S. B. ....Morrice
Harkness, Carleton A. ....Owosso
Hoshal, Verne L. ....Durand
Hume, Arthur M. ....(E) Owosso
Janci, Julius S. ....Owosso
McKnight, Edwin R. ....Owosso
Merz, Walter L. ....Owosso
Mitchell, A. B. ....Corunna
Parker, Walter T. ....Owosso
Pochert, Rolland C. ....Owosso
Purcell, F. L. ....Goodrich
Richards, Chester J. ....Durand
Sahlmark, Joseph F. ....Owosso
Shepherd, Walter F. ....Owosso
Weinkauf, William F. ....Corunna
Weston, Claude L. ....Owosso

Tuscola County

Adams, Dewitt C. ....Caro
Bates, George ....(E) Kingston
Ballard, James H. ....Cass City
Barbour, Harry A. ....Mayville
Berman, Harry ....Millington
Cook, Raymond ....Akron
Dickerson, Willard W. ....Caro
Dixon, Robert L. ....(L) Caro
Donahue, Harold T. ....Cass City
Elmemdorf, Edward N. ....Vassar
Flett, Richard O. ....Millington
Gugino, Frank J. ....Reese
Howlett, R. R. ....Caro
Kaven, G. H. ....(L) Unionville
Merrill, Elmer H. ....Caro
Morris, Frank L. ....Cass City
Nigg, Herbert L. ....Caro
Pelczar, Walter ....Unionville
Ruskin, D. B. ....Caro
Savage, Lloyd L. ....Caro
Swanson, E. C. ....Vassar
Von Renner, Otto ....(L) Vassar

Van Buren County

Boothby, Carl F. ....Hartford
Boothby, F. M. ....Lawrence
Boothby, Paul R. ....Lawrence
Bope, William P. ....(E) Decatur
Buckborough, M. W. ....South Haven
Copeland, Evan L. ....Decatur
Diephuis, Bert ....South Haven
Gano, Avison ....Bangor
Giffen, John R. ....(E) Bangor
Greenman, Newton H. ....(R) Decatur
Hoyt, W. F. ....(E) Paw Paw
Itzen, J. F. ....South Haven
Kleber, John A. ....South Haven
Maxwell, J. Charles ....(E) Paw Paw
McFadden, R. I. ....Bloomingdale
Penoyar, C. L. ....South Haven
Ralyea, John R. ....Paw Paw
Spalding, R. W. ....Gobles
Steele, Arthur H. ....Paw Paw
Ten Houten, Charles ....Paw Paw
Terwilliger, Edwin H. ....South Haven
Urist, Martin J. ....South Haven
Young, William R. ....Lawton

Washtenaw County

Adcock, John ....Ann Arbor
Aldredge, George N., Jr. ..(A) Ann Arbor
Alexander, John ....Ann Arbor
Allen, Arthur W. ....Ann Arbor
Anderson, William C. ....(A) Ann Arbor
Andros, George J. ....Ann Arbor
Atchison, Russell M. ....Northville
Badgley, C. E. ....Ann Arbor
Barker, Paul S. ....Ann Arbor
Barnwell, John ....Washington, D. C.
Barlow, R. Craig ....(A) Ann Arbor
Barss, Harold D. ....Ypsilanti
Barss, William A. ....Ypsilanti
Bass, Thomas J. ....Ypsilanti
Bassett, Robert C. ....Ann Arbor
Bassow, Paul ....Ann Arbor
Bates, Ricahrd C. ....(A) Ann Arbor
Bauer, Jere M. ....Ann Arbor
Baugh, Richard H. ....Ypsilanti
Baum, William C. ....Ann Arbor
Beebe, Hugh M. ....Ann Arbor
Beierwaltes, William H. ....Ann Arbor
Bell, Margaret ....Ann Arbor
Belser, Walter ....Ann Arbor
Benz, Alvin H. ....Ann Arbor
Bethel, Frank H. ....Ann Arbor
Bovill, Edwin G., Jr. ....(A) Ann Arbor
Brace, William M. ....Ann Arbor
Brown, Earle O., Jr. ....Ypsilanti
Brown, Phillip ....Ypsilanti
Bryant, Henry C. ....(A) Ann Arbor
Bryant, Milton F., Jr., ...(A) Ann Arbor
Buhrman, Peter ....(A) Ann Arbor
Buxton, Robert W. ....Ann Arbor
Caldwell, James L. ....(A) Ann Arbor
Calley, Clifford R. ....(A) Ann Arbor
Camp, Carl D. ....Ann Arbor
Campbell, Darrell A. ....Ann Arbor
Campbell, F. Paul ....(A) Ann Arbor
Carver, Gordon B. ....(A) Ann Arbor
Cawley, Edward P. ....Ann Arbor
Chambers, John S. ....(A) Ann Arbor
Clay, Joel W. ....(A) Ann Arbor
Clements, Glenn T. ....Ann Arbor
Clyde, Ensign E. ....Plymouth
Coller, Frederick A. ....Ann Arbor
Congdon, Charles C. ....(A) Ann Arbor
Conn, Jerome W. ....Ann Arbor
Cooper, Donald R. ....(A) Ann Arbor
Couter, William T. ....(A) Chicago, Ill.
Coyle, James E. ....(A) Ann Arbor
Coxon, Alfred W. ....Ann Arbor
Cranmer, L. Reed ....(A) Ann Arbor
Crenshaw, John C. ....(A) Ann Arbor
Crook, Clarence E. ....Ann Arbor
Cummings, Howard H. ....Ann Arbor
Curtis, Arthur C. ....Ann Arbor
Dalton, Arthur M. ....(A) Ann Arbor
DeJong, Russell N. ....Ann Arbor
Denton, Cleveland R. ....(A) Ann Arbor
DeTar, John H. ....(A) Ann Arbor
DeTar, John S. ....Milan
DeWeese, Marion S. ....Ann Arbor
Dingman, Reed O. ....Ann Arbor
Dobbie, Robert P., Jr. ....(A) Ann Arbor
Dolfin, Wilbur E. ....Ann Arbor
Donaldson, Sam W. ....Ann Arbor
Edwards, Aaron R. ....Ann Arbor
Edwards, Robert M. ....(A) Ann Arbor
Engelke, Otto K. ....Ann Arbor
Erlich, Philip ....(A) Ann Arbor
Evans, Tommy N. ....(A) Ann Arbor
Everett, Melden ....Ann Arbor
Fajans, Stefan S. ....(A) Ann Arbor
Falls, Harold F. ....Ann Arbor
Feinberg, Samuel D. ....(A) Ann Arbor
Figley, Melvin M. ....(A) Ann Arbor
Fisher, Joseph V. ....Chelsea
Follo, Marshall L. ....(A) Ann Arbor
Forrer, Gordon R. ....(A) Ypsilanti
Forsythe, Warren E. ....Ann Arbor
Fox, Ralph M. ....(A) Ann Arbor
Fralick, F. Bruce ....Ann Arbor
Francis, Thomas, Jr. ....Ann Arbor
French, A. James ....Ann Arbor
Frost, Lyle W. ....Ypsilanti
Frye, Carl H. ....Ann Arbor
Furstenberg, Albert C. ....Ann Arbor
Ganzhorn, Edwin C. ....Ann Arbor
Gates, John L. ....Ann Arbor
Gates, Neil A., Jr. ....Ann Arbor
Gignac, Ralph M. ....Wayne
Glas, Wayne W. ....(A) Ann Arbor
Glaser, Daniel F. ....Ann Arbor
Gotz, Alexander ....Ann Arbor
Gould, Stuart M., Jr. ....(A) Ann Arbor
Grawn, Frank A. ....Ypsilanti
Greenway, Guerdon D. ....Ypsilanti
Grillo, S. Phillip ....Belleville
Gulde, Andros ....(L) Chelsea
Gulick, Arthur E. ....Plymouth
Gustafson Jack R. ....(A) Yakima, Wash.
Haas, Reynold L. ....Ann Arbor
Hagerman, George W. ....Ann Arbor
Haight, Cameron ....Ann Arbor
Hall, Cameron B. ....(A) Ann Arbor
Hammond, W. W. ....Plymouth
Handorf, Heinrich H. ....Northville
Hannum, M. R. ....Milan
Harris, Bradley M. ....Ypsilanti
Harris, Scott T. ....Ypsilanti
Harrelson, William D. ....(A) Ann Arbor
Henderson, John W. ....Ann Arbor
Henry, L. Dell ....Ann Arbor
Himler, Leonard E. ....Ann Arbor
Hinerman, Dorin L. ....Ann Arbor
Hodges, Fred J. ....Ann Arbor
Holt, John F. ....Ann Arbor
Hoobler, Sibley W. ....Ann Arbor
House, Frederic B. ....Ann Arbor
Howard, S. C. ....Ann Arbor
Hume, Henry R., Jr. ....(A) Ann Arbor
Ideson, Robert S. ....Ann Arbor
Jackson, Raymond S. ....Ann Arbor
Jacob, Joseph S. ....Ann Arbor
Jimenez, Buenaventura ....Ann Arbor
Johnson, Henry T. ....(A) Ann Arbor
Johnson, Walter R., Jr. ....(A) Ann Arbor
Johnston, Elizabeth W. ....(A) Ann Arbor
Johnston, Franklin D. ....Ann Arbor
Juracsek, Valeria R. ....Ann Arbor
Juzek, Robert H. ....(A) Ann Arbor
Kahn, Edgar A. ....Ann Arbor
Kambly, Arnold H. ....Ann Arbor
Keene, Clifford H. ....Ypsilanti
Kenfield, William J. ....(A) Ann Arbor
Kemper, John W. ....Ann Arbor
King, Walter G. ....(A) Greensboro, N. C.
Kirkman, Lewis W. ....Ann Arbor
Knoll, Leo A. ....Ann Arbor
Krieger, James S. ....(A) Ann Arbor
Kruse, William T. ....(A) Ann Arbor
LaCore, Ivan A. ....Ypsilanti
LaFever, Sidney L. ....Ann Arbor
Lamberts, Austin E. ....(A) Ann Arbor
Lampe, Isadore ....Ann Arbor
Lapides, Jack ....(A) Ann Arbor
Latourette, Howard ....(A) Ann Arbor
Law, John L. ....Ann Arbor
Levin, Manuel ....(A) Ann Arbor
Lichty, Dorman E. ....Ann Arbor
Lloyd, Robert E. ....(A) Ann Arbor
Lowell, Vivion F. ....Ypsilanti
Ludwig, James B. ....(A) Ann Arbor
Lueken, Harold D. ....(A) Ann Arbor
MacGregor, John F. ....(A) Ann Arbor
MacIntyre, Robert S. ....Ann Arbor
Magee, Kenneth R. ....(A) Ann Arbor
Magielski, John E. ....(A) Ann Arbor
Mahon, Ralph D. ....(A) Ann Arbor
Maire, Lewis E. ....Dexter
Malcolm, Karl D. ....Ann Arbor
Maley, John ....(A) Ann Arbor
Marshall, Mark ....Ann Arbor
Martin, Donald W. ....Ypsilanti
Mathews, Kenneth P. ....(A) Ann Arbor
Maxwell, James H. ....Ann Arbor
McEachern, Thomas H. ....Ann Arbor
McHale, Joseph A. ....(A) Ann Arbor
Meyers, Muriel C. ....Ann Arbor
Milford, Albert F. ....Ypsilanti
Miller, Harold A. ....Saline
Miller, Norman F. ....Ann Arbor
Mills, Richard W. ....(A) Ann Arbor
Muehlig, George F. ....Ann Arbor
Myers, Dean W. ....(E) Ann Arbor
Neligh, Gordon L. ....(A) Ann Arbor
Neligh, Rosalie B. ....(A) Ann Arbor
Nelson, Marvin C. ....(A) Ann Arbor
Nesbit, Reed M. ....Ann Arbor
Newton, Charles W., Jr. ....Ann Arbor
Obenauf, Walter H. ....Ypsilanti
O'Connor, Sylvester J. ....Ann Arbor
Oliphant, L. W. ....(L) Ann Arbor
Orebaugh, John E. ....(A) Ann Arbor
Overy, Donald C. ....(A) Ann Arbor
Parnall, Christopher G. ....Ann Arbor
Patterson, Ralph M. ....Ann Arbor
Pollard, H. Marvin ....Ann Arbor
Potter, Marcia ....Ypsilanti
Price, Helen F. ....Ann Arbor
Prout, Gordon J. ....Saline
Pulford, Gurdon S. ....(A) Ann Arbor
Quilligan, James J., Jr. ....Ann Arbor
Rabinovitch, Bella ....Ypsilanti
Ransom, Henry K. ....Ann Arbor
Raphael, Theophile ....Ann Arbor
Ratliff, Rigdon K. ....Ann Arbor
Ray, Dean, K. ....(A) Ann Arbor
Reed, Thomas G. ....(A) Ann Arbor
Rees, Robert M. ....(A) Ann Arbor
Riechert, R. E., Jr. ....(A) Ann Arbor
Riecker, H. H. ....Ann Arbor
Riggs, Harold W. ....Ann Arbor

Washtenaw County (Continued)

Robinson, William D. ....Ann Arbor
Ross, C. H. ....Ann Arbor
Rowe, Richard J. ....(A) Ann Arbor
Ruchie, Warren H. ....(A) Ann Arbor
Saunders, Allen ....Ann Arbor
Sayre, George S. ....Ypsilanti
Schoch, Henry K., Jr. ....(A) Ann Arbor
Schumacker, William E. ....Ann Arbor
Scovill, Henry A. ....Ypsilanti
Seevers, Maurice H. ....Ann Arbor
Seime, Reuben I. ....Ypsilanti
Shapiro, Hyman D. ....(A) Ann Arbor
Sheldon, John M. ....Ann Arbor
Sibbald, Malcolm L. ....Chelsea
Sink, Emory W. ....Ann Arbor
Slenger, Walworth R. ....Ann Arbor
Smith, Eleanor ....Ann Arbor
Smith, Philip W. ....(A) Ann Arbor
Smith, William S. ....(A) Ann Arbor
Sparling, Irene M. ....Northville
Spears, Clarence W. ....Ypsilanti
Steinnon, O. Arthur ....(A) Ann Arbor
Stewart, Wayne H. ....(A) Ann Arbor
Stocker, Marvin L. ....Ypsilanti
Stow, Robert M. ....(A) Ann Arbor
Struthers, J. N. P. ....Ypsilanti
Sturgis, Cyrus C. ....Ann Arbor
Sullenberger, Neil H. ....(A) Ann Arbor
Sundwall, John ....Ann Arbor
Swank, Helen S. ....Ann Arbor
Teed, Reed W. ....Ann Arbor
Thieme, E. Thurston ....Ann Arbor
Thirlby, Richard ....(A) Ann Arbor
Thompson, Alden S. ....Essex, Mass.
Thompson, Robert F. ....(A) Ann Arbor
Thompson, William H. ....(A) Ann Arbor
Thomson, Daniel C. ....(A) Ann Arbor
Tompsett, Arthur C., Jr. ..(A) Ann Arbor
Towsley, Harry A. ....Ann Arbor
VanDuzen, V. L. ....Ypsilanti
Van Portfleit, Paul ....(A) Ann Arbor
Waggoner, Raymond W. ....Ann Arbor
Waldron, Alexander M. ....Ann Arbor
Ward, Clyde H. ....(A) Ann Arbor
Washburne, Charles L. ....(L) Ann Arbor
Watson, Ernest H. ....Ann Arbor
Weeks, William F. ....(A) Ann Arbor
Wessinger, John A. ..(E) Richmond, Ind.
Westcott, George W. ....Ypsilanti
Westerberg, Martha R. ....Ann Arbor
Westover, Charles J. ....Plymouth
Wetterstroem, R. G. ....Northville
Wheeler, Clayton E. ....(A) Ann Arbor
Wile, Udo J. ....Ann Arbor
Wille, Warren S. ....(A) Ypsilanti
Williams, Howard R. ....Ann Arbor
Williamson, Frederick B. ....Ypsilanti
Wilner, Warren K., Jr. ....Ann Arbor
Wilson, Charles M. ....(A) Ann Arbor
Wisdom, Inez R. ....Ann Arbor
Wollum, Arnold ....(A) Ann Arbor
Woods, J. J. ....Ypsilanti
Worth, Melissa H. ....Ypsilanti
Wright, Walter J. ....(E) Ypsilanti
Wylie, William C. ....(L) Dexter
Yoder, O. R. ....Ypsilanti
Zaugg, Frederick ....(A) Ann Arbor
Zawacki, Sigmund G. ....(A) Ann Arbor
Zerbi, Victor M. ....Willow Run Village

Wayne County

Aaron, Charles D. ....(E) Detroit
Abbott, William E. ....Detroit
Abruzzo, Anthony M. ....Eloise
Adair, Robin ....Detroit
Adamian, Gerald ....Detroit
Adams, James R. ....Dearborn
Adelson, Sidney L. ....Detroit
Adler, Sidney ....Detroit
Agnew, George H. ....Detroit
Aiuto, James J. ....Detroit
Akroyd, Cecil ....Detroit
Albrecht, Herman F. ....Detroit
Alderman, R. F. ....Detroit
Aldrich, E. Gordon ....Detroit
Alexander, Eugene J. ....Detroit
Alford, E. S. ....Belleville
Allen, John V. ....Lincoln Park
Alles, Russell W. ....Detroit
Allison, Herbert C. ..Grosse Pointe Farms
Alper, Louis ....Detroit
Alpern, Elliott B. ....Detroit
Alpiner, Sam ....Detroit
Altman, Raphael ....Detroit
Altshuler, Abraham M. ....Detroit
Altshuler, Ira M. ....Detroit
Amos, Thomas G. ....Detroit
Anderson, Bruce ....(L) Pontiac
Anderson, C. P. ....Eloise
Anderson, Gordon H. ....Dearborn
Anderson, James O. ....Detroit
Anderson, Walter L. ....Detroit
Anderson, Walter T. ....Detroit
Andries, George H., Jr. ....Detroit
Andries, Raymond C. ....Detroit
Ankley, Jerome W. ....Detroit
Annessa, Domenico M. ....Detroit
Anslow, Robert E. ....Detroit
Appelman, Howard B. ....Detroit
Archambault, Henry ....Detroit
Arehart, Burke W. ....Detroit
Arent, John G. ....Detroit
Arminski, Thomas C. ....Detroit
Armstrong, Arthur G. ....Detroit
Arnold, Effie ....Detroit
Aronstam, Noah E. ....(E) Detroit
Arrington, Robyn J. ....Detroit
Ascher, Meyer S. ....Detroit
Ashe, Robert M. ....River Rouge
Ashe, Stilson R. ....Detroit
Ashley, L. Byron ....Detroit
Ashton, F. B. ....(L) Highland Park
Asselin, Regis F. ....Detroit
Athay, Roland M. ....Eloise
Atler, Lawrence R. ....Detroit
Auble, Max E. ....Detroit
August, Harry E. ....Detroit
Auld, Douglas V. ....Detroit
Avrin, Ira ....Detroit
Axelrod, Arnold R. ....Detroit
Axelson, A. U. ....Detroit
Babcock, Kenneth B. ....Detroit
Babcock, Lloyd K. ....Detroit
Babcock, Myra E. ....Detroit
Babcock, Warren W. ....Detroit
Bach, Walter F. ....Detroit
Bachman, Morris E. ....Detroit
Bacon, Vinton A. ....Detroit
Bader, Benjamin ....Detroit
Baer, George J. ....Detroit
Baer, Raymond B. ....Detroit
Baeff, Michael A. ....Detroit
Bagley, Harry E. ....Dearborn
Bailey, Carl C. ....Detroit
Bailey, Don A. ....Detroit
Bailey, Louis J. ....Detroit
Bailey, William A. ....Dearborn
Baker, Clarence ....Detroit
Baker, Howard A. ....Detroit
Bakst, Joseph ....Detroit
Balaga, Frank T. ....Detroit
Balcerski, Matthew A. ....Detroit
Ballard, Charles S. ....Detroit
Balser, Charles Wadsworth ....Detroit
Baltz, James I. ....Detroit
Barak, Lewis R. ....Detroit
Baranowski, A. W. ....Detroit
Barbaglia, Louis C. ....Detroit
Barber, Radivoj ....Plymouth
Barenholtz, Benjamin ....Eloise
Barland, Oscar L. ....Detroit
Barnes, Donald J. ....Detroit
Barnett, Edwin D. ....Detroit
Barnett, Morton ....Detroit
Barnett, Saul E. ....Detroit
Barrett, Clarence D. ..San Francisco, Cal.
Barrett, Wyman D. ....Detroit
Barron, William H. ....Detroit
Bartemeier, Leo H. ....Detroit
Barton, Joseph R. ....Detroit
Bassett, Louis ....Detroit
Bates, Gaylord S. ....Dearborn
Bauer, Benedict J. ....Detroit
Bauer, A. Robert ....Detroit
Bauer, Lester Eugene ....Detroit
Baumer, Moe ....Detroit
Baumgarten, Elden C. ....Detroit
Bayles, John G. ....Detroit
Beach, Watson ....Detroit
Beam, A. Duane ....Grosse Pointe
Beamer, George D. ....Dearborn
Beaton, Colin ....Detroit
Beattie, Robert ....(L) Detroit
Beaver, Donald C. ....Detroit
Beavers, Robert M. ....Detroit
Becker, Abraham ....Detroit
Becker, Joseph W. ....Detroit
Becklein, Clarence L. ....Detroit
Beckwith, Carl C. ....Detroit
Beckwitt, Morris C. ....Detroit
Bedell, Archie A. ....Detroit
Beers, Morrison D. ....Detroit
Beeuwkes, L. E. ....Dearborn
Behn, Claud W. ....Detroit
Beigler, Sydney K. ....Detroit
Beitman, Max R. ....Detroit
Belanger, Ernest E. ....River Rouge
Belanger, Henri ....(E) River Rouge
Belanger, William George ....Detroit
Belisle, John A. ....Eloise
Belknap, Warren F. ....Royal Oak
Bell, J. Kenner ....Detroit
Bell, William M. ....Detroit
Benjamin, William O. ....Detroit
Bennett, Germany E. ....Detroit
Bennett, Harry B. ....Detroit
Bennett, Sanford A. ....Detroit
Bennett, Zina B. ....Detroit
Benson, Clifford D. ....Detroit
Benson, Davis A. ....Detroit
Benson, Virginia M. ....Detroit
Bentley, Frederick E. ....Plymouth
Bentley, Neil I. ....Detroit
Berge, Clarence A. ....Detroit
Bergman, Murray Stewart ....Detroit
Berke, Sydney S. ....Detroit
Berkey, William E. ....Detroit
Berlien, Ivan C. ....Detroit
Berman, Lawrence ....Detroit
Berman, Robert ....Detroit
Berman, Sidney L. ....Detroit
Bernard, Walter G. ....Detroit
Bernbaum, Bernard ....Detroit
Bernstein, Albert E. ....Detroit
Bernstein, Samuel S. ....Detroit
Berry, Jos. E. ....Detroit
Besancon, J. H. ....Detroit
Best, T. H. Edward ....Detroit
Bethea, J. Hardee ....Detroit
Bicknell, Edgar A. ....Detroit
Bicknell, Frank B. ....Detroit
Bielawski, John ....Detroit
Billingslea, Thomas ....Detroit
Birch, John R. ....Detroit
Bird, H. Waldo ....Detroit
Birkelo, Carl C. ....Detroit
Birndorf, Leonard ....Detroit
Bittker, Isadore Irving ....Detroit
Bittrich, Norbert M. ....Detroit
Bjork, Floyd J. ....Detroit
Black, Perry S. ....Detroit
Blain, Alexander W. ....Detroit
Blain, Alexander W., III ....Detroit
Blain, James H., Jr. ....Grosse Pointe
Blaine, Max ....Detroit
Blashill, James B. ....Detroit
Bleier, Alfred ....Detroit
Bleier, Joseph ....Detroit
Bloch, Abraham ....Detroit
Blodgett, James B. ....Detroit
Blodgett, William E. ....(L) Detroit
Blodgett, William H. ....Detroit
Bloom, Arthur R. ....Detroit
Blumenthal, Franz L. ....Detroit
Boccaccio, John L. ....Detroit
Boccia, James J. ....Detroit
Boddie, Arthur W. ....Detroit
Bogucki, Chester ....Detroit
Bogue, Robert E. ....Detroit
Bogusz, Ladislaus ....Eloise
Bohn, Z. Stephen ....Detroit
Boileau, Thornton I. ....Detroit
Bolstad, Donald S. ....Detroit
Bookstein, Abraham M. ....Detroit
Bornstein, Sidney ....Detroit
Bott, Edmund T. ....Wyandotte
Botvinick, Isadore ....Detroit
Boutrous, Thomas A. ....Detroit
Bovill, Edwin G. ....Bay Pine, Fla.
Bower, Donald W. ....Lincoln Park
Bower, Franklin T. ....Detroit
Bowers, Leo J. ....Detroit
Boyd, John H. ....Trenton
Boyle, Albert J. ....Detroit
Brachman, David S. ....Detroit
Bracken, Andrew H. ....Dearborn
Bradley, George T. ....Detroit
Bradshaw, Wm. H. ....Detroit
Brady, Herbert A. ....River Rouge
Braitman, Louis ....Detroit
Braley, William N. ....Detroit
Bramigk, F. W. ....Detroit
Brand, Benjamin ....Detroit
Brandt, Edward L. ....Detroit
Braun, Lionel ....Detroit
Braverman, Morris M. ....Detroit
Breitenbecher, E. R. ....Detroit
Brekke, Viola G. ....Detroit
Bremer, William M. ....Detroit
Brengle, Deane R. ....Dearborn
Brent, Morris S. ....Detroit
Breon, Guy L. ....Detroit
Brey, Norman ....Detroit
Briegel, Walter A. ....Detroit
Briggs, William J. ....Detroit
Brines, Osborne A. ....Detroit
Bringard, Elmer L. ....Detroit
Brisbois, Harold J. ....Plymouth
Brisson, Joseph C. ....Detroit

Bristol, William R. ..... Detroit
Broadman, Sylvan ..... Detroit
Bromme, William ..... Detroit
Bronson, William W. ..... Detroit
Brooks, Clark D. ..... (L) Detroit
Brooks, Charles W. ..... Detroit
Brooks, Nathan ..... Detroit
Brosius, William L. ..... Detroit
Broudo, Philip H. ..... Detroit
Brough, Glen A. ..... Detroit
Brown, Audrey O. ..... Detroit
Brown, Carlton F. ..... Detroit
Brown, Charles H. ..... Wyandotte
Brown, Gordon T. ..... Detroit
Brown, Harvey F. ..... Detroit
Brown, Henry S. ..... Detroit
Brown, John R. ..... Detroit
Brown, Robert A. ..... Detroit
Brown, Stanley H. ..... Detroit
Brown, Thomas A. ..... Detroit
Brownell, Paul G. ..... Detroit
Bruer, Edgar S. ..... River Rouge
Bruer, Edwin L. ..... Lincoln Park
Brunk, Andrew S. ..... Detroit
Brunk, Clifford F. ..... Detroit
Brunke, Bruno B. ..... Detroit
Brush, Brock Edwin ..... Detroit
Bryan, Donald I. ..... Detroit
Bryce, John D. ..... Detroit
Buchanan, William Paul ..... Detroit
Budson, Daniel ..... Detroit
Buell, John H. ..... Detroit
Buesser, Frederick G. ..... Detroit
Buller, H. L. ..... Detroit
Burke, Ralph M. ..... Detroit
Burnham, David C. ..... Detroit
Burnstine, Julius Y. ..... Detroit
Burnstine, Perry P. ..... Detroit
Burr, George C. ..... Detroit
Burr, H. Leonard ..... Grosse Pointe
Burroughs, R. G. ..... Detroit
Burrows, Howard A. ..... Dearborn
Burstein, Harry S. ..... Detroit
Burstein, I. Marvin ..... Detroit
Burstein, Morris M. ..... Detroit
Burton, D. T. ..... Detroit
Burton, Irving F. ..... Detroit
Bush, Glendon J. ..... Detroit
Bush, Lowell M. ..... Detroit
Butler, Harry J. ..... (L) Highland Park
Butler, J. Payne ..... Detroit
Butler, Lawrence H. ..... Detroit
Butler, Volney N. ..... Detroit
Butterworth, Herman ..... Lincoln Park
Buttrum, Edward J. ..... Detroit
Byers, Dudley W. ..... Detroit
Byington, Garner M. ..... Detroit
Cadieux, Henry W. ..... (L) Detroit
Cahalan, Joseph L. ..... Detroit
Caldwell, George L. ..... Detroit
Caldwell, J. Ewart ..... Detroit
Calkins, H. N. ..... Detroit
Callaghan, Thomas T. ..... Detoit
Cameron, A. H. ..... Wyandotte
Cameron, Duncan A. ..... Detroit
Campau, George H. ..... Detroit
Campbell, Charles A. ..... Dearborn
Campbell, Duncan ..... Detroit
Campbell, Duncan A. ..... (E) Detroit
Campbell, Kenneth N. ..... Detroit
Campbell, Thelma Wygant ..... Dearborn
Candler, Clarence L. ..... Detroit
Canter, Allie L. ..... Detroit
Canter, G. E. ..... Detroit
Cantor, Meyer O. ..... Detroit
Capano, Oreste A. ..... Detroit
Caputo, Joseph M. ..... Dearborn
Caraway, Jas. E. ..... Wayne
Carbone, Louis A. ..... Detroit
Carleton, Lawrence H. ..... Detroit
Carlson, Harold W. ..... Detroit
Carmichael, Edward K. ..... Detroit
Carnes, Harry E. ..... Detroit
Carp, Joseph ..... Detroit
Carpenter, C. J. ..... Wayne
Carpenter, Claire H. ..... Detroit
Carpenter, Glenn B. ..... Detroit
Carpenter, William S. ..... Detroit
Carr, J. G. ..... Detroit
Carrick, Lee ..... Detroit
Carroll, Elmer H. ..... Detroit
Carroll, Lona B. ..... Detroit
Carson, Herman J. ..... Detroit
Carstens, Henry R. ..... Chevy Chase, Maryland
Carter, John M. ..... Detroit
Carter, L. F. ..... Detroit
Casey, Byron L., Jr. ..... Detroit
Cashen, Russell M. ..... Detroit
Cassidy, William J. ..... Detroit
Castrop, Charles W. ..... Dearborn
Catherwood, Albert E. ..... Detroit
Caton, Dorothy F. ..... Detroit
Caughey, Edgar H. ..... Detroit
Caumartin, Fred E. ..... Detroit
Cavell, Roscoe W. ..... Detroit
Cellar, Frank A. ..... Detroit
Ceresko, A. R. ..... Detroit
Chabut, V. George ..... Northville
Chall, Henry G. ..... Detroit
Chapin, Sidney E. ..... Dearborn
Chapman, Aaron L. ..... Detroit
Chapman, Paul T. ..... Detroit
Chapnick, H. A. ..... Detroit
Charleston, R. A. ..... Detroit
Charnas, Sidney ..... Detroit
Chase, Clyde H. ..... Detroit
Chatel, Arthur N. ..... Detroit
Cheney, William D. ..... Detroit
Chesluk, Herman M. ..... Detroit
Chester, William P. ..... Detroit
Childs, George M. ..... Detroit
Chipman, Willard A. ..... Detroit
Chittenden, George E. ..... Detroit
Chostner, G. C. ..... Detroit
Christensen, C. A. ..... Dearborn
Christopher, James G. ..... Detroit
Chrouch, Laurence A. ..... Detroit
Church, Aloysius S. ..... Detroit
Cioffari, Mario S. ..... Detroit
Ciprian, Joseph E. ..... Detroit
Clark, Charles J. ..... Dearborn
Clark, Clarence M. ..... Detroit
Clark, Donald V. ..... Detroit
Clark, George E. ..... (E) Detroit
Clark, Harold E. ..... Detroit
Clark, Harry G. ..... Detroit
Clark, Ronald E. ..... Detroit
Clarke, Norman E. ..... Detroit
Clarke, Robert B. ..... Detroit
Clifford, C. H. ..... Detroit
Clifford, John E. ..... Detroit
Clifford, Thomas P. ..... Detroit
Clippert, Julius C. ..... Grosse Ile
Coan, Glenn L. ..... Wyandotte
Coates, Carl Amos ..... Dearborn
Cobane, John H. ..... Detroit
Cochrane, Edgar G. ..... Detroit
Cohen, H. Herbert ..... Detroit
Cohen, Lewis ..... Detroit
Cohn, Daniel E. ..... Detroit
Cohoe, Don A. ..... Detroit
Cole, Fred H. ..... Detroit
Cole, James E. ..... Detroit
Cole, Wyman C. C. ..... Detroit
Coleman, Margarete ..... Detroit
Coleman, William G. ..... Redford
Collins, James D. ..... Detroit
Collins, James E. ..... Detroit
Colvin, Leslie T. ..... Detroit
Colyer, Raymond G. ..... Detroit
Comfort, Milton D. ..... Flat Rock
Comstock, Lawrence A. ..... Trenton
Condon, Stanley ..... Detroit
Conley, L. C. M. ..... Detroit
Connelly, Richard C. ..... Detroit
Conner, Edward D. ..... Detroit
Connolly, Frank ..... Detroit
Connolly, John P. ..... Detroit
Connolly, Paul J. ..... Detroit
Connors, J. J. ..... Detroit
Conrad, Elmer R. ..... Detroit
Constable, Canute G. ..... Detroit
Cook, James A. ..... Wyandotte
Cook, James C. ..... Detroit
Cooksey, Warren B. ..... Detroit
Coolidge, M. Belle ..... (L) Grosse Pointe Park
Cooper, Benjamin J. ..... Detroit
Cooper, Edmond L. ..... Detroit
Cooper, James B. ..... Detroit
Cooper, Ralph Ruehl ..... Detroit
Corbeille, Catherine ..... Detroit
Coseglia, Robert P. ..... Detroit
Cosgrove, William J. ..... Detroit
Costello, Russell T. ..... Detroit
Cotant, John F. ..... Detroit
Cotruro, Louis D. ..... Detroit
Cotton, Schuyler O. ..... Detroit
Coulter, William J. ..... Detroit
Courville, Charles J. ..... Detroit
Cowan, Wilfrid ..... Detroit
Cowen, Leon B. ..... Detroit
Cowen, Robert L. ..... Detroit
Coyne, Douglas Ruthven ..... Detroit
Crane, Langdon T. ..... Detroit
Crawford, Albert S. ..... Detroit
Crews, Thomas H. ..... Detroit
Croll, Leo J. ..... Detroit
Croll, Maurice ..... Detroit
Crook, Charles L. ..... Highland Park
Cross, Harold E. ..... Grosse Pointe Woods
Crossen, Henry F. ..... Detroit
Croushore, James E. ..... Detroit
Cruikshank, Alexander ..... (E) Detroit
Culp, Ormond S. ..... Detroit
Curhan, Joseph H. ..... Detroit
Curry, Fillmore S. ..... Detroit
Curtis, Frank E. ..... Detroit
Curtiss, William P. ..... Detroit
Cushing, Russell G. ..... Detroit
Cusick, Paul L. ..... Detroit
Dale, Edward C. ..... Detroit
Dale, Esther H. ..... Detroit
Dale, Mark ..... Detroit
Danforth, James C., Jr. ..... Grosse Pointe Woods
Danforth, James C. ..... Grosse Pointe Woods
Danforth, Mortimer E. ..... (L) Detroit
Daniels, Lewis H. ..... Detroit
Darling, Charles E. ..... Detroit
Darling, Milton A. ..... Detroit
Darmstaetter, A. A. ..... Detroit
Darpin, Peter H. ..... Detroit
Davidson, Marry O. ..... Detroit
Davies, Thomas S. ..... Grosse Pointe
Davies, Windsor S. ..... Detroit
Davis, Egbert F. ..... (L) Detroit
Dawson, W. A. ..... Inkster
Day, Andrew J. ..... Detroit
Day J. Claude ..... Detroit
Deering, Robert J. ..... River Rouge
Defever, Cyril R. ..... Detroit
Defnet, William A. ..... Detroit
DeJongh, Edwin ..... Detroit
Delaini, Stella ..... Detroit
Delaney, James ..... Detroit
Demaray, John F. ..... Detroit
Dempster, James H. ..... (L) Detroit
DeNike, A. James ..... (L) Detroit
Denham, Ralph M. ..... Detroit
Dennis, M. S. ..... Dearborn
Denis, George M. ..... Detroit
Denison, Louis L. ..... Detroit
DePonio, Sylvester A. ..... Detroit
Deresz, Alphonse R. ..... Detroit
Derleth, Paul E. ..... Ferndale
DeSmyter, George C. ..... Detroit
De Spelder, Ray E. ..... Detroit
DeTomasi, Rome Q. ..... Detroit
Devine, Herbert W. ..... Detroit
Dibble, Harry F. ..... Detroit
Dickson, Leon A. ..... Detroit
Dickson, B. R. ..... Detroit
Dickson, Elias L. ..... Detroit
Diebel, Nelson W. ..... Detroit
Dill, Hugh L. ..... Detroit
Dill, J. Lewis ..... Detroit
DiLoreto, Panfilo C. ..... Detroit
Dittmer, Edwin F. ..... Detroit
Dixon, Fred W. ..... Dearborn
Dixon, Ray S. ..... Detroit
Dixon, Robert K. ..... Detroit
Dodds, John C. ..... Detroit
Dodenhoff, Chas. F. ..... Detroit
Dodril, F. D. ..... Detroit
Doering, Wendell ..... Detroit
Doerr, Louis E., Jr. ..... Detroit
Dolega, Stanley F. ..... Detroit
Dolman, E. Nesbitt ..... Detroit
Domzalski, Casimer A. ..... Detroit
Donald, Douglas ..... Detroit
Dondanville, Joseph M. ..... Detroit
Donelson, Kater ..... Detroit
Donovan, Daniel R., Jr. ..... Detroit
Donovan, Richard S. ..... Detroit
Dorman, Jack ..... Eloise
Dorsey, John M. ..... Highland Park
Doty, Chester A. ..... Detroit
Doub, Howard P. ..... Detroit
Douglas, Clair L. ..... Detroit
Dovitz, Benj. W. ..... Detroit
Dow, Roy E. ..... Detroit
Dowdle, Edward ..... Detroit
Downer, Ira G. ..... Detroit
Downes, George O. ..... Detroit
Doyle, George H. ..... Detroit
Drake, Ellet H. ..... Detroit
Drake, James J. ..... Detroit
Draves, Edward F. ..... Detroit
Drews, Robert S. ..... Detroit
Drinkhaus, H. I. ..... Detroit
Droock, Victor ..... Detroit
Dubin, Joseph J. ..... Detroit
Dubnove, Aaron ..... Detroit
DuBois, Paul W. ..... Detroit
Dubpernell, Karl ..... (E) Detroit
Dubpernell, Martin S. ..... Detroit
Dubpernell, Robert ..... Detroit
Dudek, John J. ..... Detroit
Dundas, E. M. ..... Dearborn
Dunlap, Henry A. ..... Detroit
Dunlap, Samson F. ..... Detroit
Dunn, Cornelius E. ..... Detroit
Durham, Everett ..... Dearborn
Durocher, Edmund J. ..... Ecorse

Dwaihy, Paul J. ..... Detroit
Dwyer, Francis ..... Detroit
Dziuba, John F. ..... Detroit
Eades, Charles C. ..... Detroit
Eadie, Gordon A. ..... Detroit
Eakins, Frederick J. ..... Dearborn
Eaterly, Robert L. ..... Ecorse
Eaton, Crosby D. ..... Detroit
Eder, Samuel J. ..... Detroit
Edgar, Irving I. ..... Detroit
Edgar, Russell G. ..... Detroit
Edmonds, Gerald W. ..... Detroit
Edmonds, W. N. ..... Detroit
Edmondson, Robert B. ..... Detroit
Edwards, Gilbert Lloyd ..... Detroit
Eisman, Clarence H. ..... Detroit
Eldredge, Edward F. ..... Detroit
Ellias, Elmer P. ..... Dearborn
Elliott, William G. ..... Detroit
Elman, Meyer J. ..... Detroit
Elvidge, Robert J. ..... Detroit
Emmert, Herman C. ..... (L) Detroit
Engel, Earl H. ..... Wyandotte
English, Leo Victor ..... Detroit
Eno, Laurel S. ..... Detroit
Ensign, Dwight C. ..... Detroit
Ensing, Osborn ..... Detroit
Epstein, S. G. ..... Detroit
Erickson, Eldon W. ..... Detroit
Eschbach, Jos. W. ..... Dearborn
Estabrook, Bert U. ..... Detroit
Ettinger, Clayton J. ..... Detroit
Evans, Jos. M. ..... Detroit
Evans, Leland S. ..... Redford
Evans, William A., Jr. ..... Detroit
Evison, Emerson O. ..... Detroit
Ewing, C. H. ..... Detroit
Evseeff, George S. ..... Detroit
Eyres, Albert E. ..... Grosse Pointe
Fagin, Irvin Donald ..... Detroit
Falick, Mordecai Louis ..... Detroit
Falk, Ira E. ..... Detroit
Fallis, Lawrence S. ..... Detroit
Fandrich, Thedore ..... Detroit
Farbman, Aaron A. ..... Detroit
Farbman, Simon S. ..... Detroit
Faunce, Sherman P. ..... Detroit
Felcyn, W. George ..... Detroit
Feld, David ..... Detroit
Feldkamp, Lee E. ..... Detroit
Feldman, N. L. ..... Detroit
Feldstein, Martin Z. ..... Detroit
Fellers, Ray L. ..... Detroit
Fenech, Harold B. ..... Detroit
Fenner, William G. ..... Detroit
Fenton, Edwin H. ..... Detroit
Fenton, Meryl M. ..... Detroit
Fenton, Russell F. ..... Detroit
Fenton, Stanley C. ..... Detroit
Ferrara, L. V. ..... Detroit
Ferrara, Virginia M. ..... Detroit
Fettig, Carl A. ..... (L) Detroit
Finch, Alvis D. ..... Detroit
Finch, F. Sinclair ..... Detroit
Fine, Edward ..... Detroit
Finkelstein, M. B. ..... Detroit
Fischer, Frederick J. ..... Detroit
Fisher, George S. ..... Detroit
Fisher, James M. ..... Grosse Pointe
Fisher, O. O. ..... Detroit
Fisher, Ralph ..... Detroit
Fitzgerald, James M. ..... Detroit
Flaherty, H. J. ..... Detroit
Flaherty, Norman W. ..... River Rouge
Fleming, L. N. ..... Detroit
Flora, William Robert ..... Detroit
Flower, J. A. ..... Del Mar, Calif.
Fogt, Herbert E. ..... Detroit
Fogt, Robert G. ..... Detroit
Foley, Hugh S. ..... Dearborn
Foley, Joseph M. ..... Detroit
Font, Anthony J. ..... Detroit
Foote, James A. ..... Lincoln Park
Ford, George A. ..... (L) Detroit
Ford, Sylvester ..... Detroit
Ford, Walter D. ..... (E) Detroit
Fordell, F. S. ..... Lincoln Park
Forsythe, John R. ..... Detroit
Foster, Daniel P. ..... Detroit
Foster, E. Bruce ..... Detroit
Foster, Linus J. ..... Detroit
Foster, Owen C. ..... Detroit
Foster, Wallace M. ..... Detroit
Foster, William L. ..... Detroit
Fowler, Melvin E. ..... Detroit
Fox, Morris Edward ..... Detroit
Fraiberg, Paul L. ..... Detroit
Franjac, M. J. ..... Dearborn
Franzen, Nils A. ..... Detroit
Frazer, Mary Margaret ..... Detroit
Free, Harry W. ..... Detroit
Freedman, John ..... Detroit
Freeman, B. F. ..... Detroit
Freeman, D. K. ..... Detroit
Freeman, Mabel ..... Detroit
Freeman, Michael W. ..... Detroit
Freeman, Thelma ..... Birmingham
Freeman, Wilmer ..... Detroit
Freid, Samuel ..... Detroit
Freier, Morton L. ..... Detroit
Fremont, Joseph C. ..... Detroit
Freund, Hugo A. ..... Detroit
Friedlaender, Alex S. ..... Detroit
Friedlaender, Sidney ..... Detroit
Friedman, David ..... Detroit
Friedman, I. H. ..... Detroit
Fritz, George E. ..... Detroit
Froelicher, Emil L. ..... Detroit
Frothingham, George E. ..... (E) Detroit
Fryfogle, James D. ..... Detroit
Fulgenzi, Andrew A. ..... Detroit
Fullenwider, Allan C. ..... Detroit
Fuller, Hugh M. ..... Detroit
Fulton, William James ..... Detroit
Gaberman, David B. ..... Detroit
Gaffney, J. Mitchell ..... Detroit
Galantowicz, Henry C. ..... Detroit
Galdonyi, Laslo ..... Detroit
Galerneau, D. B. ..... Center Line
Gannan, Arthur M. ..... Detroit
Ganschow, John H. ..... Detroit
Gardner, Lawrence W. ..... Detroit
Gariepy, Louis J. ..... Detroit
Gass, H. Harvey ..... Detroit
Gaston, Herbert B. ..... Detroit
Gates, Nathaniel H. ..... Detroit
Gaydos, Leonard M. ..... Detroit
Gaynor, Alex ..... Detroit
Gehring, Harold W. ..... Detroit
Geib, Ledru O. ..... Detroit
Geitz, William A. ..... Detroit
Gelbach. Philip D. ..... Detroit
Gellert, I. S. ..... (L) Detroit
Gemeroy, J. C. ..... Detroit
Gerondale, Edmond J. ..... Detroit
Gibson, Dumbar ..... Detroit
Giese, Fred W. ..... Detroit
Gigante, Nicola ..... Detroit
Gilbert, Harold R. ..... Wyandotte
Gillespie, Stephen M. ..... Dearborn
Gillman, R. W. ..... (E) Detroit
Ginsberg, Harold I. ..... Detroit
Gitlin, Charles ..... Detroit
Gitlin, Julius R. ..... Detroit
Gittins, Perry C. ..... Detroit
Glasgow, Gordon K. ..... Detroit
Glassman, Samuel ..... Detroit
Glazer, Walter S. ..... Detroit
Gleason, John E. ..... (L) Detroit
Glees, John L. ..... Detroit
Glemet, Raymond B. ..... Detroit
Glowacki, B. F. ..... Detroit
Gmeiner, Clarence C. ..... Detroit
Goerke, Elmer A. ..... Romulus
Goetz, Angus G. ..... Detroit
Goins, William F. ..... Detroit
Goldberg, Arthur ..... Detroit
Goldberg, Harry H. ..... Detroit
Goldberg, Nathan ..... Detroit
Goldin, M. I. ..... Detroit
Goldman, Abe A. ..... Detroit
Goldman, Aubrey ..... Detroit
Goldman, Perry ..... Detroit
Goldstein, Abe S. ..... Detroit
Goldstone, R. R. ..... Detroit
Gollman, Maurice D. ..... Detroit
Gonne, William S. ..... Detroit
Goodrich, Benjamin E. ..... Detroit
Gordon, John W. ..... (R) Detroit
Gordon, William H. ..... Detroit
Gorelick, Martin J. ..... Dearborn
Gorning, Raymond P. ..... Detroit
Goryl, Stephen V. ..... Detroit
Goss, Samuel B. ..... Detroit
Gostine, Edmond ..... Detroit
Gottschalk, Fred W. ..... Detroit
Gould, S. Emanuel ..... Eloise
Gourley, Eugene V. ..... Detroit
Goux, Raymond S. ..... Detroit
Grace, Joseph M. ..... Detroit
Graff, J. M. ..... Detroit
Graham, John G., Jr. ..... Detroit
Grain, Gerald O. ..... Detroit
Grajewski, Leo E. ..... Detroit
Gramley, William ..... Detroit
Granger, Francis L. ..... Detroit
Grant, F. Gordon ..... Detroit
Grant, Heman E. ..... (L) Detroit
Gratton, Henri L. ..... Detroit
Gravelle, Lawrence J. ..... Detroit
Gray, Jacques Pierce ..... Detroit
Greek, Louis M. ..... Detroit
Green, Ellis R. ..... Detroit
Green, Lewis ..... Detroit
Green, Louis M. ..... Detroit
Green, Nelson W. ..... Detroit
Green, Simpson W. ..... Detroit
Greenberg, Jack R. ..... Detroit
Greenberg, Jack R. ..... Detroit
Greenberg, Julius J. ..... Detroit
Greenberg, Morris Z. ..... Detroit
Greene, John B. ..... Detroit
Greenidge, Robert ..... Detroit
Greenlee, William Tate ..... Detroit
Greiner, Bert A. ..... Detroit
Grekin, John N. ..... Detroit
Grekin, Samuel L. ..... Detroit
Griffith, A. J. ..... Detroit
Griffiths, Sidney ..... Detroit
Grinstein, Alexander ..... Detroit
Gripe, Richard P. ..... Detroit
Grob, Otto ..... Detroit
Grossman, Sol ..... Detroit
Grotz, Genevieve A. ..... Eloise
Gudes, David S. ..... Detroit
Guerrero, Jose ..... Detroit
Guimaraes, A. S. ..... Dearborn
Gurdjian, E. S. ..... Detroit
Gurskis, Eugenia ..... Detroit
Gutow, Benjamin R. ..... Detroit
Gutterman, Meyer A. ..... Detroit
Haefele, Leslie P. ..... Garden City
Haking, Leonard ..... Detroit
Hale, Arthur S. ..... Detroit
Hall, E. Walter ..... Detroit
Hall, James A. J. ..... Detroit
Hall, Ralph E. ..... Detroit
Hall, Robert J. ..... Detroit
Hall, Winthrop D. ..... Dearborn
Hallen, Leonard ..... Detroit
H'Amada, Norman K. ..... Detroit
Hamburger, A. C. ..... Detroit
Hamil, Brenton M. ..... Detroit
Hamilton, Norman C. ..... Detroit
Hamilton, William ..... Detroit
Hamilton, William F. ..... (L) Detroit
Hammer, Edwin J. ..... Detroit
Hammond, Arthur E. ..... Detroit
Hammond, James L. ..... Inkster
Hand, Fordus V. ..... Detroit
Hank, Emil J. ..... Detroit
Hanna, Carl ..... Detroit
Hanna, E. Howard ..... Detroit
Hansen, Frederick E. ..... Detroit
Hanser, Joshua ..... (L) Detroit
Hardstaff, R. John ..... Detroit
Hardy, George C. ..... Detroit
Harelik, E. W. ..... Detroit
Harkaway, Roman ..... Detroit
Harley, Garth H. ..... Dearborn
Harley, Louis M. ..... Detroit
Harm, Winfred B. ..... Detroit
Harper, Jesse T. ..... Detroit
Harrington, Frank L. ..... Detroit
Harris, Harold H. ..... Detroit
Harris, Ivor David ..... Detroit
Harrison, Hugh ..... (E) Detroit
Harrison, Wesley, Jr. ..... Detroit
Harrison, William L. ..... Detroit
Hart, Charles E. ..... Detroit
Hartkop, Henry H. ..... Detroit
Hartman, F. W. ..... Detroit
Hartmann, Waldemar B. ..... Detroit
Hartquist, Robert J, ... Wyandotte
Hartzell, John B. ..... Detroit
Hasley, Clyde K. ..... Detroit
Hasley, Daniel E. ..... Detroit
Hassig, Walter W. ..... Grosse Pointe Farms
Hastings, Orville J. ..... Detroit
Hause, Glen E. ..... Detroit
Hauser, I. Jerome ..... Detroit
Hauser, John E. ..... Detroit
Hauser, Maurice J. ..... Detroit
Havers, Howard ..... Detroit
Hawkins, James W. ..... Detroit
Hayes, Joseph D. ..... Detroit
Heath, Leonard P. ..... Detroit
Heavner, Lyle E. ..... Detroit
Hecht, Manes, S. ..... Detroit
Hedges, Frank W. ..... Detroit
Heenan, Theophilus H. ..... Detroit
Heideman, Louis E. ..... Detroit
Heldt, Thomas J. ..... Detroit
Hendelman, Manuel H. ..... Detroit
Henderson, Arthur B. ..... Detroit
Henderson, Charles W. ..... Detroit
Henderson, Harold ..... Detroit
Henderson, J. L. ..... Detroit
Henderson, John C. ..... Detroit
Henderson, Leslie T. ..... Detroit
Henderson, William E. ..... Detroit
Henig, Fred N. ..... Detroit
Henrich, Lawrence E. ..... Detroit
Herbst, Harold B. ..... Detroit
Herkimer, Dan R. ..... Lincoln Park
Herrold, Rose E. ..... Detroit

Herschelmann, Roy F. ..... Detroit
Herwick, John T. ..... Detroit
Hessler, Harvey W. ..... Detroit
Hewitt, Leland V. ..... Detroit
Hewitt, Robert S. ..... Lincoln Park
Heyner, Stanley A. ..... Detroit
Hicks, Fred G. ..... Dearborn
Higbee, Arthur L. ..... Detroit
Hildebrand, John E. ..... Detroit
Hileman, S. Lee ..... Ecorse
Hillenberg, Sidney J. ..... Detroit
Hillenbrand, Alfred E. ..... Detroit
Hiller, Glenn I. ..... Highland Park
Hinko, Edward N. ..... Eloise
Hirschfield, Alexander H. ..... Detroit
Hirschman, Louis J. ..... (E) Detroit
Hoagland, Thomas V. ..... Detroit
Hochman, Morton M. ..... Detroit
Hodges, Jason ..... Detroit
Hodgkinson, C. P. ..... Detroit
Hodoski, Frank J. ..... Detroit
Hoffman, E. S. ..... Detroit
Hoffman, Edward A. ..... Dearborn
Hoffman, Harry Y. ..... Detroit
Hoffman, Henry A. ..... Detroit
Hoffman, Martin H. ..... Detroit
Holcomb, August A. ..... Northville
Hollander, A. J. ..... Detroit
Hollis, Henry B. ..... Detroit
Holman, Herbert H. ..... Detroit
Holmes, Alfred W. ..... Detroit
Holt, Henry T. ..... Grosse Pointe Farms
Honhart, Fred L. ..... Detroit
Honor, William H. ..... (L) Wyandotte
Hookey, John A. ..... Wyandotte
Hooper, Norman L. ..... Detroit
Hoops, George B. ..... (L) Detroit
Hopkins, J. E. ..... Detroit
Horan, Thomas N. ..... Detroit
Horkins, Harold A. ..... Detroit
Horny, Hugo ..... Grosse Pointe
Horton, Reece H. ..... Detroit
Horvath, Louis O. ..... Detroit
Horwitz, John B. ..... Detroit
Hotchkiss, Loris M. ..... Farmington
Howard, Austin Z. ..... Detroit
Howard, Philip J. ..... Detroit
Howard, W. L. ..... Northville
Howell, Bert F. ..... Detroit
Howes, Homer A. ..... Detroit
Howes, Willard Boyden ..... Detroit
Howlett, Howard T. ..... Detroit
Hromadko, Louis ..... Detroit
Hubbard, John P. ..... Detroit
Hubbard, Ralph G. ..... Detroit
Hudson, J. Stewart ..... Grosse Pointe
Hudson, William A. ..... Detroit
Huegli, Wilfred A. ..... Detroit
Huff, Reginald G. ..... Wayne
Hull, LeRoy W. ..... Detroit
Hughes, Theodore ..... Detroit
Huminski, T. S. ..... Detroit
Hummel, Arthur R. ..... Detroit
Hunt, T. H. ..... Detroit
Hunt, Verne G. ..... Detroit
Hunter, Basil H. ..... Detroit
Hunter, Elmer N. ..... Detroit
Husband, Chas. W. ..... Detroit
Hyatt, Jarvis M. ..... Dearborn
Hyde, Frederick W., Jr. ..... Detroit
Hyde, Frederick W. ..... Detroit
Hyland, John R. ..... Detroit
Hyman, Samuel J. ..... Inkster

Iacobell, Peter H. ..... Detroit
Igna, Eli J. ..... Detroit
Ignatius, Aram A. ..... Detroit
Irvine, Earle Albert ..... Detroit
Irwin, William A. ..... Detroit
Iseri, Lloyd T. ..... Detroit
Israel, Joseph G. ..... Detroit
Iwata, Herbert T. ..... Detroit
Jacobson, Samuel D. ..... Detroit
Jacoby, Myron D. ..... Detroit
Jaeger, Julius P. ..... (L) Detroit
Jaekel, C. N. ..... Detroit
Jaffar, Donald J. ..... Detroit
Jaffe, J. L. ..... Detroit
Jaffe, Jacob ..... Detroit
Jaffe, Louis ..... Detroit
Jahsman, William E. ..... Detroit
Jamieson, Thomas J. ..... Lincoln Park
Janicki, Natalia J. ..... Eloise
Jarre, Hans A. ..... Detroit
Jarvis, Harold F. ..... Detroit
Jarsen, Frank J. ..... Dearborn
Jasion, L. J. ..... Detroit
Jeffries, Benjamin ..... Detroit
Jend, William James ..... (L) Detroit
Jenkins, E. A. ..... Detroit
Jennings, Charles G. ..... Detroit
Jennings, Elmer R. ..... Detroit
Jennings, Robert M. ..... Eloise
Jentgen, Chas. J. ..... Detroit
Jentgen, L. G. ..... Detroit
Jeremias, Robert C. ..... Detroit
Jewell, F. C. ..... Detroit
Jocz, M. W. ..... Grosse Pointe Park
Jodar, E. O. ..... Detroit
John, Hubert R. ..... Detroit
Johnson, Homer L. ..... Detroit
Johnson, Ralph A. ..... Detroit
Johnson, Thomas ..... Detroit
Johnson, Vernon P. ..... Detroit
Johnson, Vincent C. ..... Detroit
Johnson, W. H. M. ..... Detroit
Johnston, Charles G. ..... Detroit
Johnston, Everett V. ..... Detroit
Johnston, Joseph A. ..... Detroit
Johnston, John L. ..... Detroit
Johnston, Richard M. ..... Detroit
Johnston, William E. ..... Detroit
Johnstone, B. I. ..... Detroit
Joinville, E. V. ..... Detroit
Jones, Arthur J. ..... Detroit
Jones, Adrian R. ..... Detroit
Jones, Edna M. ..... Northville
Jones, L. Faunt ..... Detroit
Jones, Roy D. ..... Detroit
Jordan, R. Gerald ..... Detroit
Joyce, Stanley J. ..... Detroit
Juliar, Benjamin ..... Detroit
Jurow, Harry N. ..... Detroit
Jury, Donald B. ..... Detroit

Kaisch, Kenneth R. ..... Detroit
Kalayjian, Bernard S. ..... Detroit
Kallett, Herbert I. ..... Detroit
Kallman, David ..... Detroit
Kallman, Leo ..... Detroit
Kallman, R. Robert ..... Detroit
Kamin, Louis E. ..... Detroit
Kaminski, Zeno L. ..... Detroit
Kamperman, George A. ..... Detroit
Kanter, Herman ..... Detroit
Kapetansky, A. J. ..... Detroit
Kapetansky, N. J. ..... Detroit
Kaplita, Walter A. ..... Hamtramck
Karr, Herbert S. ..... Detroit
Kasabach, Harry ..... Detroit
Kasabach, V. Y. ..... Detroit
Kasper, Joseph A. ..... Grosse Pointe
Kaspor, Albert J. ..... Detroit
Kass, J. B. ..... Detroit
Katzman, I. S. ..... Detroit
Kaump, Donald H. ..... Detroit
Kauppinen, J. A. ..... Detroit
Kawecki, Lucian ..... Dearborn
Kay, Edward W. ..... Hamtramck
Kazdan, Louis L. ..... Detroit
Kazdan, Morris A. ..... Allen Park
Keane, William E. ..... (L) Detroit
Kehoe, Henry J. ..... Detroit
Keim, H. L. ..... Detroit
Keith, Kelly ..... Detroit
Kelley, F. J. ..... Detroit
Kelmenson, Victor A. ..... Detroit
Kelson, Malcolm J. ..... Detroit
Kemler, Walter J. ..... Ecorse
Kennary, James M. ..... Detroit
Kennedy, Chas. S. ..... Detroit
Kennedy, Donald J. ..... Detroit
Kennedy, Robert B. ..... Detroit
Kennedy, William Y. ..... Detroit
Kenning, John C. ..... (A) Beverly Hills, Calif.
Kern, Wheeler H. ..... Garden City
Kernkamp, Ralph F. ..... Bradenton, Fla.
Kernick, Melvin O. ..... Detroit
Kersten, Werner ..... Detroit
Kerzman, Joseph H. ..... Detroit
Keshishian, Sarkis K. ..... Detroit
Keyes, Eugene C. ..... Detroit
Keyes, John W. ..... Detroit
Kibzey, Ambrose T. ..... Detroit
Kidner, Frederick C. ..... (L) Detroit
Killins, Charles G. ..... Detroit
Kimberlin, Kenneth K. ..... Detroit
King, Edward D. ..... Detroit
King, Melbourne J. ..... Detroit
Kingswood, Roy C. ..... Detroit
Kinsley, George ..... Detroit
Kirschbaum, Harry M. ..... Detroit
Kitzmiller, John L. ..... Detroit
Klebba, Paul ..... Detroit
Klein, Alfred ..... Detroit
Klein, Howard A. ..... Detroit
Klein, Sander P. ..... Detroit
Klein, William ..... Detroit
Kleinman, S. ..... Detroit
Kliger, David ..... Detroit
Kline, Starr L. ..... Detroit
Klippen, Arthur J. ..... Dearborn
Klosowski, Joseph ..... Detroit
Knaggs, Charles W. ..... (L) Grosse Pointe
Knaggs, Earl J. ..... Wyandotte
Knapp, Byron S. ..... River Rouge
Knapp, Floyd B. ..... Detroit
Knobloch, Edmund J. ..... Detroit
Knoch, Hubert S. ..... Detroit
Knox, Ross M. ..... Ecorse
Koch, Donald A. ..... Port Huron
Koebel, R. H. ..... Detroit
Koerber, Edward J. ..... Detroit
Koessler, George L. ..... (L) Detroit
Kogut, C. S. ..... Detroit
Kokowicz, Raymond J. ..... Detroit
Kolasa, Wm. B. ..... Detroit
Kopel, Joseph O. ..... Detroit
Koren, Louis ..... Detroit
Korum, Lyle W. ..... Detroit
Korchnitzke, Herman K. ..... Detroit
Kossayda, Adam W. ..... Detroit
Koster, Koert ..... Detroit
Kovach, Emery P. ..... Detroit
Kovan, Dennis D. ..... Highland Park
Kozlinski, Anthony E. ..... Detroit
Kozlow, Louise E. Ange ..... Detroit
Kraft, Raymond B. ..... Detroit
Kraft, Ruth M. ..... Detroit
Krass, Edward W. ..... Detroit
Kraus, John J. ..... Detroit
Krebs, William T. ..... Detroit
Kreinbring, George E. ..... Detroit
Kretzschmar, John C. ..... Detroit
Krieg, Earl G. ..... Detroit
Krieger, Harley L. ..... Detroit
Kritchman, M. J. ..... Detroit
Kroha, Lawrence A. ..... Detroit
Krohn, Albert H. ..... Detroit
Krynicki, Francis X. ..... Detroit
Kubanek, Joseph L. ..... Dearborn
Kucmierz, Francis S. ..... Detroit
Kuhn, Albert Arthur ..... Detroit
Kuhn, Richard F. ..... Detroit
Kulaski, Chester H. ..... Detroit
Kullman, Harold J. ..... Dearborn
Kurcz, Joseph A. ..... Detroit
Kurtz, Harry C. ..... Detroit
Kurtz, I. J. ..... Detroit
Kurtz, Leonard D. ..... Detroit
Kwasiborski, Stanley A. ..... Wyandotte

LaBerge, James M. ..... Wyandotte
LaBine, Alfred C. ..... Detroit
La Ferte, Alfred D. ..... Detroit
Lakoff, Charles ..... Detroit
Lam, Conrad R. ..... Detroit
Lamberson, Frank A. ..... Detroit
Lammy, James V. ..... Detroit
Lampman, H. H. ..... Detroit
Landers, Maurice B., Sr. ..... Detroit
Lang, Ernest Frederick ..... Detroit
Lang, Leonard W. ..... Detroit
Lange, Anthony H. ..... Detroit
Lange, William A. ..... Detroit
Laning, George M. ..... Detroit
Langston, Hirm ..... Detroit
Lansky, Mandell ..... Detroit
Lapham, Fred E. ..... Detroit
Large, A. M. ..... Detroit
Larned, Richard I. ..... Detroit
Larsson, B. Hjalmar ..... Detroit
Lasichak, Andrew G. ..... Detroit
Lasley, James William ..... Detroit
Lathrop, Philip L. ..... Detroit
Latteier, Karl K. ..... Detroit
Lauppe, Edward H. ..... Detroit
Lauppe, Frederick A. ..... Detroit
Laurisin, Eugene ..... Detroit
Lazar, Morton R. ..... Detroit
Leach, David ..... Detroit
Leacock, Robert C. ..... Grosse Pointe
Leader, Luther R. ..... Detroit
Leaver, L. Ross ..... Detroit
Lebamoff, Alexander T. ..... Allen Park
Leckie, George C. ..... Detroit
Lecklider, A. F. ..... Detroit
Lee, Harry E. ..... Detroit
LeGallee, George M. ..... Detroit
Leibinger, H. R. ..... Grosse Pointe
Leipsitz, Louis S. ..... Detroit
Leiser, Rudolf ..... Eloise
Leithauser, Daniel J. ..... Detroit
Leith, Dorothy L. ..... Detroit
Leland, Sol ..... Detroit
Lemak, Noreen A. ..... Detroit
Lemley, Clark ..... Detroit
Lemmon, Charles E. ..... Detroit
Lemmon, Clarence W. ..... River Rouge
Lentine, James J. ..... Detroit
Lenz, Willard R. ..... Detroit
Lepard, C. W. ..... Detroit
Lepley, Fred O. ..... Detroit
Lerman, S. E. ..... Center Line
Lescohier, Alex W. ..... Grosse Pointe
L'Esperance, Simon P. ..... Detroit
Leszynski, J. S. ..... Detroit
Leucutia, Traian ..... Detroit

Levagood, Floyd.....Detroit
Levant, Arthur B. .....Detroit
Levin, David M.....Detroit
Levin, Herbert G. .....Detroit
Levin, Michael M.....Detroit
Levin, Samuel J.....Detroit
Levine, Sidney S.....Detroit
Levitt, Edward J.....Detroit
Levitt, Irving.....Detroit
Levitt, Nathan.....Detroit
Levy, Marvin B.....Detroit
Lewis, Charles T.....Detroit
Lewis, J. Hugh.....Wyandotte
Lewis, L. A.....Detroit
Lewis, Wilfred John.....Detroit
Libbrecht, Robert V.....Allen Park
Lichter, M. L.....Melvindale
Liddicoat, A. G.....Detroit
Lieberman, B. L.....Detroit
Lightbody, James J.....Detroit
Lignell, Rudolph W.....Detroit
Lilly, Charles J.....Detroit
Linkner, Leonard.....Detroit
Linn, Herman J. .....Detroit
Linton, James R.....Eloise
Lipinski, Stanley L.....Detroit
Lipkin, Ezra.....Detroit
Lipton, Raymond F.....Detroit
Lipschutz, Louis .....Detroit
Litsky, Abraham.....Detroit
Littlejohn, David.....Dearborn
Lockwood, Bruce C. .....Detroit
Lofstrom, James E. .....Detroit
Long, Earle C. .....Detroit
Long, John J. .....Detroit
Longo, Salvatore .....Detroit
Longyear, Harold W. .....Detroit
Lookanoff, V. A. .....Detroit
Loranger, C. B. .....Detroit
Loranger, Guy L. .....Northville
Lorber, Joseph H. .....Detroit
Lorentzen, Edwin H. .....Detroit
Lovas, William S. .....Detroit
Love, W. Thomas .....Detroit
Lowe, Adolf W. .....Detroit
Lowrie, William L., Jr. .....Detroit
Lowry, George L. .....Detroit
Lublin, Ann .....Detroit
Luce, Henry A. .....Detroit
Lukas, John R. .....Detroit
Lumpkin, John G., Jr. .....Detroit
Lutz, Earl F. .....Detroit
Lynn, David H. .....Detroit
Lynn, Harvey D. .....Detroit
Lyons, William Harrington .....Detroit
Lytle, Robert P. .....Detroit

Maben, Hayward C., Jr. .....Detroit
Mabley, J. Donald .....Detroit
MacArthur, Robert A. .....Detroit
MacCracken, Frances L. .....Detroit
MacDougall, O. P. .....Detroit
MacFarlane, Howard W. .....Detroit
MacGregor, William W. .....Detroit
Mack, Harold C. .....Detroit
MacKenzie, Earle D. .....Detroit
MacKenzie, Edward P. .....Detroit
MacKenzie, Frank M. .....Detroit
Mackenzie, John W. .....Grosse Point
Mackersie, W. G. .....Detroit
MacMillan, Francis B. .....Detroit
MacMullen, Frank B. .....Detroit
MacPherson, K. C. .....Detroit
MacQueen, Malcolm D. .....Detroit
Maczewski, John E. .....Detroit
Magnell, Ralph C. .....Detroit
Maguire, Clarence E. .....Detroit
Mahoney, Hugh M. .....Detroit
Maibauer, Frederick P. .....Wyandotte
Maino, Linus J. .....Detroit
Maire, Edward D. .....Grosse Pointe
Mair, Harold U. .....Detroit
Malachowski, B. T. .....Detroit
Malik, Edward A. .....Detroit
Malik, Nur M. .....Detroit
Malina, Stephen .....Detroit
Malone, Richard .....Detroit
Maloney, John A. .....Detroit
Maltzer, Joseph H. .....Detroit
Mancuso, Vincent S. .....Detroit
Manning, Morey H. .....Detroit
Manwaring, John T. .....Detroit
Maples, Douglas E. .....Detroit
Mapletoft, Kenneth E. .....Detroit
Marcotte, Oliver .....Detroit
Marcus, Daniel B. .....Detroit
Marinus, Carleton J. .....Detroit
Mark, Jerome .....Detroit
Markey, Alexander .....Dearborn
Markoe, Rupert C. L. .....Detroit
Marks, Ben .....Detroit
Marks, Morris .....Detroit
Marsh, Alton R. .....Detroit
Marsden, Thomas B. .....Detroit
Marshall, James R. .....Detroit
Martin, Edward G. .....Detroit
Martin, Elbert A. .....Detroit
Martin, J. B., Jr. .....Detroit
Martin, L. R. .....Detroit
Martin, Peter A. .....Detroit
Martin, Robert M. .....Detroit
Martin, Wilbur C. .....Detroit
Martinez, Pedro O. .....Detroit
Martmer, Edgar E. .....Detroit
Marwil, Thomas B. .....Detroit
Mason, Percy W. .....Detroit
Mateer, John G. .....Detroit
Mathes, Charles J. .....Detroit
Mattman, Paul E. .....Detroit
Maun, Mark E. .....Detroit
Maxwell, J. Harvey .....Detroit
May, Earl W. .....(A) Alpena
May, Frederick T., Jr. .....Detroit
Mayer, E. V. .....Detroit
Mayer, Willard D. .....Detroit
Maynard, Fred M. .....Allen Park
Mayne, Cecil H. .....Detroit
McAfee, F. W. .....Detroit
McAlonan, William T. .....Detroit
McAlpine, Gordon S. .....Detroit
McBroom, Russell E. .....Detroit
McCadie, James .....Detroit
McCain, French H. .....Detroit
McClelland, Rachel .....Detroit
McClellan, Robert J. .....Detroit
McClellan, Robert J., II .....Detroit
McClendon, James J. .....Detroit
McClintock, J. J. .....Detroit
McClure, Robert W. .....Detroit
McClure, Roy D. .....Detroit
McClure, William R. .....Detroit
McColl, Charles W. .....Wyandotte
McColl, Clarke M. .....Detroit
McColl, Kenneth M. .....Detroit
McCollum, E. B. .....Detroit
McCord, Carey P. .....Detroit
McCormick, Colin C. .....Dearborn
McCullough, Lester E. .....Detroit
McDonald, Angus L. .....Detroit
McDonald, George O. .....Detroit
McEvitt, William G. .....Detroit
McFadyen, Hugh A. .....Detroit
McGarvah, A. W. .....Detroit
McGarvah, Jos. A. .....Detroit
McGhee, Richard S. .....Detroit
McGillicuddy, Walter E. .....Detroit
McGinnis, Daniel H. .....Detroit
McGlaughlin, Nicholas D. .....Wyandotte
McGough, Joseph M. .....Detroit
McGraw, Arthur B. .....Detroit
McGuire, M. Ruth .....Detroit
McIntyre, W. B. .....Detroit
McKean, G. Thomas .....Detroit
McKean, Richard M. .....Detroit
McKenna, Charles J. .....Detroit
McKinley, Donald .....Detroit
McKinnon, John D. .....Detroit
McKnight, Robert E. .....Detroit
McLane, Harriet E. .....Detroit
McLean, Don W. .....Detroit
McLean, Harold G. .....Detroit
McPherson, R. J. .....Detroit
McQuiggan, Mark R. .....Detroit
McRae, Donald H. .....Detroit
Meek, Stuart F. .....Detroit
Meinecke, Helmuth A. .....Detroit
Mellen, Hyman S. .....Detroit
Melink, Maxim P. .....Detroit
Menagh, Frank R. .....Detroit
Mendelssohn, R. J. .....Detroit
Merkel, Charles C. .....Grosse Pointe
Merrill, William O. .....Detroit
Merriman, K. S. .....Detroit
Merritt, Earl G. .....Detroit
Mersky, Charlotte I. .....Detroit
Metes, John S. .....Detroit
Metzger, Harry C. .....Detroit
Meyer, Ruben .....Detroit
Meyers, Maurice P. .....Detroit
Meyers, P. Marjorie H. .....Detroit
Meyers, Solomon G. .....Detroit
Michels, Julius .....Detroit
Miley, H. H. .....Detroit
Milgrom, Sidney .....Detroit
Millard, Glenn E. .....Detroit
Miller, Daniel H. .....Detroit
Miller, Elmer B. .....Detroit
Miller, Glenn F. .....Detroit
Miller, Karl .....Detroit
Miller, Myron H. .....Detroit
Miller, Robert B. .....Detroit
Miller, Thomas H. .....Detroit
Miller, Wm. E. .....Detroit
Mills, Clinton C. .....Detroit
Mills, Georgia V. .....Royal Oak
Mintz, Morris J. .....Detroit
Mintz, Edward I. .....Detroit
Miral, Solomon P. .....Detroit
Mishelevich, Sophie .....Detroit
Mitchell, Augustus W. .....Ecorse
Mitchell, C. Leslie .....Detroit
Mitchell, Gertrude F. .....Detroit
Mitchell, Ralston S. .....Detroit
Moehlig, Robert C. .....Detroit
Mogill, George .....Detroit
Moisides, V. P. .....Detroit
Moll, Clarence D. .....Detroit
Molner, Joseph G. .....Detroit
Molnar, S. K. .....Dearborn
Mond, Edward .....Detroit
Monfort, Willard .....(E) Highland Park
Monson, Robert C. .....Detroit
Montante, Joseph R. .....Detroit
Montgomery, John C. .....Detroit
Monto, Raymond .....Detroit
Mopper, Coleman .....Hamtranck
Morand, Louis J. .....Detroit
Morgan, Donald N. .....Detroit
Moriarty, George .....Detroit
Morin, John B. .....(L) Detroit
Moritz, H. C. .....Detroit
Morley, Harold V. .....Detroit
Morley, James A. .....Detroit
Moroun, S. J. .....Detroit
Morris, Harold L. .....Detroit
Morse, Plinn F. .....Detroit
Morton, David .....Detroit
Morton, John B. .....(E) Detroit
Mosen, Max M. .....Detroit
Moss, Ervin B.....Detroit
Moss, Nathan H. .....Detroit
Moss, Selma S. .....Detroit
Mossman, John D. .....Detroit
Mott, Carlin P. .....Detroit
Mullenhagen, Walter J. .....Detroit
Munson, Henry T. .....Detroit
Murphy, D. J. .....Detroit
Murphy, John M. .....Detroit
Murphy, Robert T. .....Detroit
Murphy, Scipio G. .....Detroit
Murphy, Thomas L. .....Detroit
Murphy, W. M. .....Detroit
Murray, George M. .....Detroit
Murray, Thomas H. .....Detroit
Murray, William A. .....Detroit
Muske, Paul H. .....Detroit
Musselman, Merle M. .....Eloise
Myers, Dan W. .....Detroit
Myers, Gordon B. .....Detroit

Nagle, John W. .....Wyandotte
Nahigian, Russell .....Dearborn
Naud, Henry J. .....Detroit
Naylor, Archibald E. .....Detroit
Naylor, Arthur H. .....Detroit
Neeb, Walter G. .....Detroit
Neill, Edwin J. .....Detroit
Nelson, Harry M. .....Detroit
Nelson, Victor .....Detroit
Newbarr, Arthur A. .....Detroit
Newman, Max Karl .....Detroit
Nichamin, Samuel J. .....Detroit
Nickels, Albert W. .....Detroit
Nickerson, "I" Dean.....Detroit
Nielsen, Aage E.....Detroit
Nigro, Norman D. .....Detroit
Nill, John B. .....Detroit
Nill, William F. .....Detroit
Noble, William C. .....Ecorse
Noer, Rudolf J. .....Detroit
Nolan, Bernard E. .....Detroit
Nolting, Wilfred S. .....Detroit
Norconk, A. A. .....Detroit
Norcott, Edith S. .....Detroit
Norris, Edgar .....Grosse Pointe
Northrop, Arthur K. .....(E) Detroit
Norton, A. B. .....Detroit
Norton, Charles S. .....Detroit
Novy, R. L. .....Detroit
Nowicki, Joseph A. .....Detroit
Nunn, James W. .....Detroit

O'Brien, E. J. .....Detroit
O'Brien, G. M. .....Detroit
O'Donnell, Charles H. .....Detroit
O'Donnell, David H. .....(E) Detroit
O'Donnell, Dayton H., Jr. .....Detroit
Ohmart, Galen B. .....Detroit
Ohrt, Harold F. .....Detroit
Okun, Milton H. .....Detroit
Olen, Alex .....Detroit
O'Linn, Francis P. .....Detroit
Olmsted, George .....Detroit
Olmsted, Wm. R. .....(L) Detroit
Olson, James A. .....Detroit
Oman, Cyrus F. .....Detroit
Oppenheim, J. M. .....Detroit
Orecklin, L. .....Detroit
Organ, Fred W. .....Detroit

Ormond, John K. ..... Detroit
O'Rourke, Paul V. ..... Detroit
O'Rourke, R. M. ..... Detroit
Osius, Eugene A. ..... Detroit
Ott, Harold A. ..... Detroit
Ottaway, John P. ..... Detroit
Owen, Clarence I. ..... Detroit
Owen, James A. ..... Detroit
Palmer, Alice E. ..... Detroit
Palmer, R. Johnston ..... (E) Detroit
Pangburn, L. E. ..... Detroit
Panic, Stephen M. ..... Detroit
Papp, Sandor D. ..... Detroit
Parker, Benjamin R. ..... Detroit
Parker, Walter R. ..... (E) Detroit
Parr, Robert W. ..... Detroit
Parsons, John P. ..... Grosse Pointe Park
Pasternacki, Nobert T. ..... Detroit
Paterson, Walter G. ..... (L) Detroit
Pawlowski, Jerome ..... Detroit
Payne, Eugene ..... Detroit
Paysner, Harry A. ..... Detroit
Peabody, Charles W. ..... Detroit
Pearman, Charles L. R. ..... Detroit
Pearse, Arthur J. ..... Eloise
Pearse, Harry A. ..... Detroit
Peggs, George F. ..... Detroit
Penberthy, G. C. ..... Detroit
Pendy, John M. ..... Detroit
Pensler, Leslie ..... Detroit
Pensler, Meyer ..... Detroit
Pequegnot, Charles F. ..... (L) Detroit
Perdue, Grace M. ..... Detroit
Perkin, Frank S. ..... Detroit
Perlis, H. L. ..... Detroit
Peterman, Earl A. ..... Highland Park
Petix, Samuel C. ..... Detroit
Petoskey, Edward A. ..... Detroit
Petty, Thomas A. ..... Dearnborn
Peven, Philip ..... Detroit
Pevin, Pauline ..... Detroit
Pfeiffer, Rudolph L. ..... Detroit
Piccone, Louisa ..... East Dearborn
Pichette, J. Walton ..... Detroit
Pickard, Orlando W. ..... Detroit
Pierce, Frank L. ..... Detroit
Pierson, Max J. ..... Detroit
Pietraszewski, A. W. ..... Detroit
Pilling, Matthew A. ..... Seattle, Wash.
Pinckard, Karl G. ..... Dearborn
Pink, Rose M. ..... Detroit
Pinney, Lyman J. ..... Detroit
Pino, Ralph H. ..... Detroit
Piper, Clark C. ..... Detroit
Piper, Ralph R. ..... Detroit
Pittman, J. E. ..... Detroit
Plaggemeyer, H. W. ..... Detroit
Platz, Carol K. ..... Detroit
Pliskow, Harold ..... Detroit
Podezwa, John W. ..... Grosse Pointe Woods
Podolsky, Harold M. ..... Detroit
Poirier, Ralph A. ..... Detroit
Polentz, Charles ..... Detroit
Pollack, John J. ..... Detroit
Pool, Walter D. ..... Detroit
Poos, Edgar E. ..... Detroit
Porretta, Anthony C. ..... Detroit
Porretta, F. S. ..... Detroit
Porter, Howard J. ..... Romulus
Posch, Joseph L. ..... Detroit
Posner, Irving ..... Detroit
Pratt, Jean P. ..... Detroit
Pratt, Lawrence A. ..... Detroit
Prendergast, John J. ..... Dryden
Priborsky, Benjamin H. ..... Detroit
Price, Alvin Edwin ..... Detroit
Price, A. Hazen ..... Detroit
Procailo, Alex B. ..... Dearborn
Proctor, Bruce ..... Detroit
Proud, Robert H. ..... Flat Rock
Pugh, Richard ..... Dearborn
Pugliesi, Benedetto ..... Detroit
Purcell, Frank H. ..... Detroit
Purves, William L. ..... Detroit
Quigley, Eugene ..... Dearborn
Quigley, William ..... Detroit
Quinn, Edward L. ..... Detroit

Rahm, Lambert P. ..... Detroit
Raiford, Frank P. ..... Detroit
Raiford, Frank P., Jr. ..... Detroit
Rand, Morris ..... Detroit
Raskin, Morris ..... Detroit
Rastello, Peter B. ..... Detroit
Ratigan, Carl S. ..... Dearborn
Rau, Frederick W. ..... Detroit
Raynor, Harold F. ..... Detroit
Rebuck, John W. ..... Detroit
Redfern, William E. ..... Detroit
Reed, E. Hobart ..... (A) Detroit
Reed, H. Walter ..... Detroit
Reed, Ivor E. ..... Detroit
Rees, Howard C. ..... Detroit
Reichling, Raymond J., Jr. ..... Detroit
Reid, John Gilbert ..... Detroit
Reid, Wesley G. ..... Detroit
Reiff, Morris V. ..... Detroit
Reinbolt, Charles A. ..... (L) Detroit
Reinsh, Ernest R. ..... Detroit
Reisman, Nathan J. ..... Detroit
Rennell, Leo P. ..... Detroit
Renton, George W. ..... Detroit
Reveno, William S. ..... Detroit
Rexford, W. K. ..... Detroit
Reye, Heinrich A. ..... Detroit
Reyner, C. E. ..... Detroit
Reynolds, Lawrence ..... Detroit
Reynolds, R. P. ..... Detroit
Rezanka, Harold J. ..... Grosse Pointe
Rhoades, Francis P. ..... Detroit
Rice, Harold B. ..... Detroit
Rice, Meshel ..... Oxford
Richardson, Allan L. ..... Detroit
Richardson, Robert P. ..... Wayne
Rick, Paul J. ..... Detroit
Ridge, Ralph W. ..... Wyandotte
Rieckoff, George G. ..... Detroit
Rieden, James A. ..... Detroit
Rieg, John F. ..... Detroit
Rieger, John B. ..... Detroit
Rieger, Mary H. ..... Detroit
Riethmiller, Robert ..... Detroit
Riseborough, E. C. ..... Detroit
Rizzo, Frank ..... Grosse Point Park
Roberts, Arthur J. ..... Lincoln Park
Robb, Edward L. ..... Detroit
Robb, Herbert F. ..... Belleville
Robb, J. Milton ..... Grosse Pointe Village
Robins, Samuel C. ..... Detroit
Robinson, Edwin L. ..... Detroit
Robinson, George W. ..... (L) Detroit
Robinson, Howard ..... Detroit
Robinson, R. G. ..... Detroit
Rogers, Aaron Z. ..... Grosse Pointe Woods
Rogers, George E. B. ..... Detroit
Rogers, James D. ..... Wyandotte
Rogin, James R. ..... Detroit
Rogoff, Abraham S. ..... Detroit
Rohde, Paul C. ..... Detroit
Rom, Jack ..... Detroit
Roman, Stanley J. ..... Detroit
Roney, Eugene H. ..... Detroit
Rosbolt, Oscar P. ..... Detroit
Rose, Bernard ..... Detroit
Rosen, Harold M. ..... Detroit
Rosenbaum, Herbert ..... Detroit
Rosenbloom, Alvin B. ..... Eloise
Rosenthal, Louis H. ..... Detroit
Rosenthal, Samuel ..... Detroit
Rosenwach, Felix F. ..... Detroit
Ross, Ben C. ..... Detroit
Ross, Donald G. ..... Grosse Pointe
Ross, Hyman ..... Detroit
Rotarius, E. M. ..... Detroit
Roth, Edward T. ..... Detroit
Roth, Theodore I. ..... Detroit
Rothbart, Harold B. ..... Detroit
Rothman, Emil D. ..... Detroit
Rothman, H. R. ..... Detroit
Rottenberg, Leon ..... Detroit
Rowda, Michael S. ..... Detroit
Rucker, Julian J. ..... Detroit
Ruedemann, A. D. ..... Detroit
Rueger, Milton I. ..... Detroit
Rueger, Ralph C. ..... Detroit
Runge, Edward F. ..... Dearborn
Rupprecht, Emil F. ..... Detroit
Rush, Alva D. ..... Detroit
Ruskin, Samuel H. ..... Detroit
Russell, John C. ..... Detroit
Rutzen, Arthur C. ..... Detroit
Ryan, Charles F. ..... Detroit
Rydzewski, Jos. B. ..... Detroit
Ryerson, Frank L. ..... Detroit
Ryerson, F. Stuart ..... Detroit

Sack, Anthony G. ..... Detroit
Sadler, Henry H., Jr. ..... Detroit
Sage, Bernard A. ..... Dearborn
Sage, Edward O. ..... (L) Detroit
Sage, Thomas ..... Detroit
Sager, Edward L. ..... Detroit
St. Amour, Hector ..... Detroit
St. Louis, R. J. ..... River Rouge
Sakorraphos, Stelios N. ..... Detroit
Salchow, Paul T. ..... Detroit
Salowich, John N. ..... Allen Park
Saltzstein, Harry C. ..... Detroit
Sand, Harry H. ..... Dearborn
Sander, Irvin W. ..... Detroit
Sanders, Alex W. ..... Detroit
Sanderson, Alvord R. ..... Grosse Pointe Park
Sanderson, Suzanne M. ..... Detroit
Sandler, Nathaniel ..... Detroit
Sands, G. E. ..... Detroit
Sandweiss, D. J. ..... Detroit
Sapala, M. Andrew ..... Detroit
Saraf, Leo B. ..... Detroit
Sargent, William R. ..... Detroit
Sarracino, John B. ..... Detroit
Saunders, William H. ..... Dearborn
Sauter, Simon H. ..... Detroit
Savignac, Eugene M. ..... Detroit
Scarney, Herman D. ..... Detroit
Schaefer, Robert L. ..... Detroit
Schaeffer, Martin ..... Detroit
Schane, David ..... Detroit
Schembeck, I. S. ..... Detroit
Schenden, Augustine J. ..... Melvindale
Schiller, A. E. ..... Detroit
Schillinger, Harold K. ..... Dearborn
Schinagel, Geza ..... Detroit
Schirack, Ray D. ..... Grosse Pointe Woods
Schkloven, Norman ..... Detroit
Schlacht, George F. ..... Romulus
Schlafer, Nathan H. ..... Detroit
Schlemer, John H. ..... Detroit
Schlesinger, Henry ..... Detroit
Schmidt, Harry E. ..... Detroit
Schmidt, Milton R. ..... Trenton
Schmidt, Werner F. ..... Detroit
Schmier, Burton L. ..... Detroit
Schmitt, Norman L. ..... Detroit
Schneck, R. J. ..... Detroit
Schneider, Alexander ..... Detroit
Schneider, Curt P. ..... Detroit
Schoenfield, Gilbert D. ..... Detroit
Scholes, Daniel R. ..... Detroit
Schorr, Robert L. ..... (E) Detroit
Schooten, Sarah S. ..... Detroit
Schraer, Paul H. ..... Detroit
Schreiber, Frederic F. ..... Detroit
Schroeder, Carlisle F. ..... Detroit
Schulte, Carl H. ..... Detroit
Schultz, Ernest C. ..... Detroit
Schwartz, Ben ..... Detroit
Schwartz, Louis A. ..... Detroit
Schwartz, Oscar D. ..... Detroit
Schwartzberg, Jos. A. ..... Detroit
Schwarz, Francis S. ..... Detroit
Schweigert, C. F. ..... Detroit
Sciarrino, Stanley V. ..... Detroit
Scott, R. J. ..... Detroit
Scott, William J. ..... Grosse Pointe Farms
Scoville, Victor ..... Detroit
Screen, Raymond J. ..... Detroit
Seabrooks, B. F. ..... Detroit
Sears, Charles H. ..... Detroit
Secord, Eugene W. ..... Detroit
Seeley, James B. ..... Dearborn
Seeley, Ward F. ..... Detroit
Segar, Laurence F. ..... Detroit
Seibert, Alvin H. ..... Grosse Pointe Park
Seiferlein, Archie L. ..... Detroit
Selby, C. D. ..... Detroit
Self, William G. ..... Detroit
Sellers, Charles W. ..... Detroit
Sellers, Graham ..... Detroit
Selman, J. H. ..... Detroit
Sengpiel, Gene ..... Detroit
Serrester, Bernard F. ..... Detroit
Seski, Arthur G. ..... Detroit
Sewell, George ..... Detroit
Shafarman, Eugene M. ..... Detroit
Shaffer, Jos. H. ..... Detroit
Shaffer, Loren W. ..... Detroit
Shafter, Royce R. ..... Detroit
Shanoski, Stanley J. ..... Detroit
Shapiro, I. Allen ..... Detroit
Shapiro, Jacob ..... Detroit
Shapiro, Oscar U. ..... Detroit
Shapiro, Reuben I. ..... Detroit
Sharrer, Charles H. ..... Detroit
Shelden, Warren E. ..... Detroit
Sheldon, John A. ..... Detroit
Shelton, C. F. ..... Detroit
Sheppard, Emma L. W. ..... Centerline
Sherman, William LaRue ..... Detroit
Sherrin, Edgar R. ..... Detroit
Sherwood, DeWitt L. ..... (L) Detroit
Shewchuk, Alexander P. ..... Allen Park
Shields, William L. ..... Detroit
Shifrin, Peter G. ..... Detroit
Shiovitz, Louis ..... Detroit
Shipton, W. Harvey ..... Detroit
Shlain, Benjamin ..... Detroit
Shore, O. J. ..... Detroit
Shortz, Gerald ..... Detroit
Shotwell, Carlos W. ..... (L) Detroit
Shulak, Irving B. ..... Detroit
Shumaker, Edward J. ..... Detroit
Shurly, Burt R. ..... (E) Detroit
Siddall, Roger S. ..... Detroit
Sieber, Edward H. ..... Dearborn
Siefert, John L. ..... Detroit
Siefert, William A. ..... Detroit
Siegel, Henry ..... Detroit

Sigler, John W. ..... Detroit
Sill, Jack A. ..... Detroit
Silvarman, I. Zable ..... Detroit
Silver, Israel ..... Detroit
Silverman, Max ..... Detroit
Silverman, Maurice M. ..... Detroit
Simmons, Donald R. ..... Detroit
Simon, Emil R. ..... Detroit
Simon, Heinz G. ..... Detroit
Simpson, Clarence E. ..... (L) Detroit
Sinclair, James W. ..... Detroit
Singer, Floyd W. ..... Dearborn
Sippola, George W. ..... Detroit
Sisson, John M. ..... Detroit
Skinner, W. Clare ..... Detroit
Sklover, I. J. ..... Detroit
Skrzycki, Stephen S. ..... Detroit
Skully, Edward J. ..... Detroit
Sladen, Frank J. ..... Grosse Pointe
Slahetke, Vincent E. ..... Detroit
Slaughter, Fred M. ..... Detroit
Slaugenhaupt, J. G. ..... Detroit
Slazinski, Leo W. ..... Detroit
Slevin, John G. ..... Detroit
Sliwin, Edward P. ..... Detroit
Slusky, Joseph ..... Detroit
Small, Henry ..... Detroit
Smathers, Homer M. ..... Detroit
Smeck, Arthur R. ..... Detroit
Smith, Clarence V. ..... Detroit
Smith, Claude A. ..... River Rouge
Smith, F. Janney ..... Detroit
Smith, Henry L. ..... Detroit
Smith, J. Allen ..... Detroit
Smith, James A. ..... Detroit
Smith, Kenneth D. ..... Detroit
Snedeker, Bernard C. ..... Detroit
Snow, L. W. ..... Northville
Snyder, Arthur M. ..... Detroit
Sobel, Robert A. ..... Detroit
Sokolov, Raymond A. ..... Detroit
Somers, Donald C. ..... Detroit
Sonda, Lewis P. ..... Detroit
Sones, Frank Mason, Jr. ..... Detroit
Sorock, Milton L. ..... Detroit
Spademan, Loren C. ..... Detroit
Spalding, Edward ..... Detroit
Sparling, Harold I. ..... Northville
Speck, Carlos C. ..... Allen Park
Spector, Maurice J. ..... Detroit
Spero, Gerald D. ..... Detroit
Sperry, Frederick L. ..... Detroit
Spiro, Adolph ..... Detroit
Springborn, Benjamin R. ..... Detroit
Sprunk, Carl J. ..... Detroit
Squires, W. H. ..... Eloise
Stafford, Frank W. J. ..... Detroit
Stalker, Hugh ..... Grosse Pointe
Stamell, Benjamin B. ..... Detroit
Stamell, Meyer ..... Detroit
Stanton, James M. ..... Detroit
Stanton, Myron R. ..... Detroit
Stapleton, William J., Jr. ..... (L) Detroit
Starrs, Thomas C. ..... Detroit
Staub, Howard P. ..... Detroit
Stearns, Alex B. ..... Detroit
Stebbins, Charles E. ..... Detroit
Steele, Hugh M. ..... Detroit
Stefani, Ernest L. ..... Detroit
Stefani, Raymond T. ..... Detroit
Steffensen, Ellis ..... Detroit
Stein, Albert H. ..... Detroit
Stein, Edward ..... Detroit
Stein, James R. ..... Ferndale
Stein, Saul Charles ..... VanDyke
Steinbach, Henry B. ..... Detroit
Steinberger, Eugene ..... Detroit
Steiner, Frederick ..... Garden City
Steiner, Gabriel ..... Detroit
Steiner, Louis J. ..... Detroit
Steinhardt, Milton J. ..... Detroit
Stellhorn, Chester E. ..... Detroit
Stellhorn, Mary Christine ..... Detroit
Sterba, Richard F. ..... Detroit
Sterling, Robert R. ..... Detroit
Stern, Edward A. ..... Detroit
Stern, Harry L. ..... Detroit
Stern, Louis D. ..... Detroit
Stevenson, Charles ..... Detroit
Stewart, Harry L. ..... Detroit
Stewart, Thomas O. ..... Detroit
Stiefel, Daniel M. ..... Detroit
Stith, Dwight E. ..... Detroit
Stocker, Harry ..... Dearborn
Stocker, Lawrence L. ..... Detroit
Stockwell, Benjamin W. ..... Detroit
Stokfisz, Thaddeus ..... Detroit
Stout, Lindley H. ..... Detroit
Straith, Claire L. ..... Detroit
Strand, Martin E. ..... West Dearborn
Stricker, Henry D. ..... Detroit
Strickroot, Fred L. ..... Detroit
Strohschein, Don F. ..... Detroit
Stryker, Joan C. ..... Grosse Isle
Stryker, Walter A. ..... Wyandotte
Stubbs, C. T. ..... Detroit
Stubbs, Harold W. ..... Detroit
Stuecheli, Milton B. ..... Grosse Pointe
Stump, George D. ..... Detroit
Sugar, David I. ..... Detroit
Sugar, H. Saul ..... Detroit
Sugarman, Marcus H. ..... Detroit
Sullivan, Hugh A. ..... Detroit
Sullivan, Paul J. ..... North Seattle, Wash.
Summers, William A. ..... Detroit
Summers, William S. ..... Detroit
Surbis, John P. ..... Detroit
Sutherland, Jacob M. ..... Detroit
Swanson, Carl W. ..... Detroit
Swanson, Cleary N. ..... Detroit
Swanson, Robert G. ..... Detroit
Swartz, Fred G., Jr. ..... Detroit
Sweeny, Donald N., Jr. ..... Detroit
Swift, Karl L. ..... Detroit
Switzer, Bertrand C. ..... Detroit
Syphax, Charles S., Jr. ..... Detroit
Szappanyos, Bela T. ..... Detroit
Szejda, J. C. ..... Detroit
Szladek, Frank J. ..... Wyandotte
Szmigiel, A. J. ..... Detroit
Szokolay, Joseph P. ..... Detroit

Talbot, Frank G. ..... Detroit
Tallant, Edward J. ..... Detroit
Tamblyn, E. J. ..... Detroit
Tasker, Helen ..... Detroit
Tassie, Ralph N. ..... Detroit
Tatelis, Gabriel ..... Detroit
Taurence, William H. ..... Wyandotte
Taylor, Aaron ..... Detroit
Taylor, Ivan B. ..... Detroit
Taylor, Nelson M. ..... Grosse Pointe
Taylor, Reu Spencer ..... (L) Detroit
Tazzioli, Henry A. ..... Detroit
Tear, Malcolm J. ..... Detroit
Teitelbaum, Myer ..... Detroit
Tenaglia, Thomas A. ..... Ecorse
Tenerowicz, Rudolph G. ..... Detroit
Texter, Elmer C. ..... Detroit
Thaler, William J. ..... Detroit
Thompson, Arthur Lee ..... Detroit
Thompson, H. O. ..... Detroit
Thompson, W. A. ..... Detroit
Thomson, Alexander ..... (E) Detroit
Thornell, Harold E. ..... Detroit
Thosteson, George C. ..... Detroit
Toaz, Robert B. ..... Detroit
Todd, Gordon M. ..... Detroit
Toepel, Otto T. ..... (E) Detroit
Tomsu, Charles L. ..... Detroit
Top, F. H. ..... Detroit
Torres, Estelle ..... Detroit
Townsend, Frank M. ..... Detroit
Tremain, Harold ..... Detroit
Trengenza, W. Kenneth ..... Detroit
Troester, George A. ..... Detroit
Trombino, James F. ..... Detroit
Trombley, Bryan ..... Detroit
Trombley, Joseph J., Jr. ..... Detroit
Truba, Paul K. ..... Detroit
Truemner, Keith ..... Detroit
Truszkowski, Edward G. ..... Hamtramck
Trythall, S. W. ..... Detroit
Tulloch, John ..... Detroit
Tupper, Roy D. ..... Detroit
Turbett, Claude W. ..... Detroit
Turcotte, Vincent J. ..... Detroit
Turkel, Henry ..... Detroit
Turnbull, Jack V. ..... Dearborn
Tyson, William E. E. ..... (L) Detroit

Uida, Chester J. ..... Wayne
Ulbrich, Henry L. ..... Detroit
Ulrich, Willis H. ..... Detroit
Umphrey, Clarence E. ..... Detroit
Unsdek, Harold E. ..... Detroit
Usher, William Kay ..... Detroit

Vale, C. Fremont ..... Detroit
VanBecelaere, L. H. ..... Ecorse
Van Eck, James E. ..... Detroit
VanGundy, Clyde R. ..... Detroit
Van Nest, A. E. ..... Detroit
Van Rhee, George ..... Detroit
Van Riper, Steven L. ..... Detroit
Vardon, Colin C. ..... Detroit
Vardon, Edward M. ..... Detroit
Vasu, V. O. ..... Detroit
Vincent, James LeRoi ..... Wayne
Vogel, Hyman A. ..... Detroit
Vokes, Milton D. ..... Detroit
Vonder Heide, E. C. ..... Detroit
Vossler, A. E. ..... Detroit
Waddington, Jos. E. G. ..... (E) Detroit
Waggoner, C. Stanley ..... Detroit
Waggoner, Lyle G. ..... Detroit
Wainger, Max J. ..... Detroit
Wainstock, Michael ..... Detroit
Wakeman, Everal M. ..... Dearborn
Waldbott, George L. ..... Detroit
Walker, Roger V. ..... Detroit
Wallace, S. Willard ..... Detroit
Walls, Arch ..... Detroit
Walser, Howard C. ..... Detroit
Walsh, Charles R. ..... Fort Worth, Fla.
Walsh, Francis P. ..... Detroit
Walter, Arthur W. ..... Detroit
Walters, Albert G. ..... Detroit
Waltz, Paul J. ..... Detroit
Ward, George F. ..... Detroit
Warden, Horace F. W. ..... Detroit
Warner, J. F. ..... Detroit
Warner, P. L. ..... Detroit
Warren, Irving A. ..... Detroit
Warren, Wadsworth ..... Detroit
Wasserman, Lewis C. ..... Detroit
Waszak, Charles J. ..... Detroit
Watson, Douglas J. ..... Detroit
Watson, Harwood G. ..... Dearborn
Watson, J. Edwin ..... Detroit
Watson, Robert W. ..... Highland Park
Watts, Frederick B. ..... Detroit
Watts, John C. ..... Detroit
Watts, John J. ..... Detroit
Wayne, Morris A. ..... Detroit
Weaver, Clarence E. ..... Detroit
Weaver, Delmar F. ..... Detroit
Weber, Karl Wm. ..... Detroit
Webster, John E. ..... Detroit
Weed, Milton R. ..... Detroit
Wehenkel, Albert M. ..... (L) Detroit
Weiner, Maurice B. ..... Detroit
Weingarden, David H. ..... Detroit
Weinstein, Jacob ..... Detroit
Weisberg, A. Allen ..... Detroit
Weisberg, Harry ..... Detroit
Weisberg, Jacob ..... Detroit
Weisenthal, Irvin ..... Detroit
Weiser, Frank A. ..... Detroit
Weiss, Casimer P. ..... Detroit
Weiss, J. G. ..... Detroit
Welch, John H. ..... Detroit
Weller, Charles N. ..... Detroit
Wells, Martha ..... Detroit
Weltman, Carl G. ..... Detroit
Wendel, Jacob S. ..... Detroit
Wenzel, Jacob F. ..... Detroit
West, Howard Gaige ..... Detroit
Weston, Bernard ..... Detroit
Weston, Earl E. ..... Detroit
Weston, Horace L. ..... Detroit
Weyher, Russell F. ..... Detroit
Whalen, Neil J. ..... Detroit
Wharton, Thomas V. ..... Wyandotte
Wheeler, Stewart C. ..... Detroit
Whelan, Joseph L. ..... Detroit
Whinnery, Randall A. ..... Detroit
White, Milo R. ..... Detroit
White, Milton W. ..... Detroit
White, Prosper D., Jr. ..... Detroit
Whitehead, Leston S. ..... Detroit
Whitehead, Walter K. ..... Detroit
Whiteley, Robert K. ..... Detroit
Whitney, Elmer L. ..... Detroit
Whitney, Rex E. ..... Detroit
Wiant, John L. ..... Detroit
Whittaker, Alfred H. ..... Detroit
Wickham, A. B. ..... (L) Phoenix, Ariz.
Wiechowski, Henry E. ..... Detroit
Wiener, Israel ..... Detroit
Wiener, Morton ..... Detroit
Wietersen, Fred K. ..... Detroit
Wight, Fred B. ..... Detroit
Wilcox, L. F. ..... Detroit
Wilhelm, Seymour ..... Detroit
Wilkinson, A. P. ..... Detroit
Williams, Clarence J. ..... Detroit
Wills, Josephus N. ..... Detroit
Wilson, Andrew ..... Detroit
Wilson, Gerald A. ..... Detroit
Wilson, M. C. ..... Detroit
Wilson, Stuart C. ..... Detroit
Wilson, Walter J. ..... (E) Detroit
Winton, George J. ..... Detroit
Wiren, Lennart W., Jr. ..... Detroit
Wishropp, E. A. ..... Grosse Pointe
Wissman, H. C. ..... Dearborn
Wittenberg, Arthur A. ..... Detroit
Wittenberg, Samson S. ..... Detroit
Wittenberg, Sidney S. ..... Detroit
Witter, Frank C. ..... (L) Detroit
Witter, Joseph A. ..... Detroit
Witus, Carl ..... Detroit
Witus, Morris ..... Detroit
Wolfe, Max O. ..... Detroit
Wollank, Helen Wilson ..... Detroit

Wollenberg, R. A. C. ..... Detroit
Wood, Kenneth A. ..... Detroit
Woodburne, Harris L. ..... Detroit
Woods, W. Edward ..... Detroit
Woodworth, William P. ..... Detroit
Worzniak, Joseph J. ..... Wyandotte
Wreggit, Winston R. ..... Highland Park
Wright, Charles H. ..... Detroit
Wright, Lance S. ..... Plymouth
Wruble, Joseph ..... Detroit
Wunsch, Richard E. ..... Detroit
Yesayian, H. G. ..... Detroit
Yetzer, William J. ..... Detroit
Yott, William J. ..... Detroit
Young, Donald A. ..... Detroit
Young, Donald C. ..... Detroit
Young, Lloyd B. ..... Detroit
Young, Viola M. ..... Detroit
Zabinski, Edward J. ..... Detroit
Zackheim, Herschel ..... Dearborn
Zawadzki, Edward S. ..... Detroit
Zbikowski, Joseph ..... Eloise
Zbudowski, A. S. ..... Birmingham
Zbudowski, Myron R. ..... Hamtramck
Zemens, Joseph L. ..... Detroit
Ziegler, Robert F. ..... Detroit
Zinn, George H. ..... Detroit
Zinterhofer, John ..... Birmingham
Zlatkin, Louis ..... Detroit
Zolliker, Margaret ..... Detroit
Zonnis, Marian Z. ..... Detroit
Zukowski, Henry J. ..... Grosse Pointe Woods
Zukowski, Sigmund A. ..... Detroit

Wexford County

Anderson, Francis ..... Escanaba
Daugharty, Robert V. ..... Cadillac
Holm, Augustus ..... Leroy
Inman, J. C. ..... Lake City
Lomman, Ralph ..... Manton
Merritt, C. E. ..... Manton
Moore, Gregory P. ..... Cadillac
Murphy, Michael R. ..... Cadillac
Paye, Philip ..... Cadillac
Posthuma, Millard ..... Cadillac
Purdy, Calvin E. ..... Buckley
Smith, Fred R. ..... Lake City
Smith, Wallace J. ..... Cadillac
Spinks, Robert E. ..... Cadillac
Stokes, William H. ..... Lake City
Tornberg, Gordon C. ..... Cadillac
Youngman, Douglas ..... Marion

Woman's Auxiliary
to the
Michigan State Medical Society
Roster 1950

Allegan County

Brachman, Mrs. Peter ..... Allegan
Brown, Mrs. L. F. ..... Otsego
Burdick, Mrs. J. G. ..... Allegan
Chase, Mrs. W. E. ..... Wayland
Corkill, Mrs. C. C. ..... Saugatuck
Goude, Mrs. Gordon ..... Hopkins
Johnson, Mrs. E. B. ..... Allegan
Mahau, Mrs. James E. ..... Allegan
Miller, Mrs. Kenneth ..... Saugatuck
Scheiter, Mrs. H. E. ..... Allegan
VanDerKolk, Mrs. Bert ..... Hopkins

Alpena-Alcona-Presque Isle Counties

Arscott, Mrs. Edward F. ..... Roger City
Burkholder, Mrs. H. ..... Alpena
Heir, Mrs. E. A. ..... Alpena
Jackson, Mrs. W. P. ..... Roger City
Kessler, Mrs. H. ..... Alpena
Leapard, Mrs. Jack ..... Alpena
Linch, Mrs. Donald ..... Onaway
Riker, Mrs. J. L. ..... Alpena
Rowell, Mrs. W. J. ..... Alpena
Spens, Mrs. James ..... Alpena

Bay County

Alcorn, Mrs. Marshall ..... Bay City
Alcorn, Mrs. Kent A. ..... Bay City
Allen, Mrs. A. D. ..... Bay City
Andrews, Mrs. F. T. ..... Bay City
Asline, Mrs. J. Norris ..... Essexville
Brown, Mrs. George M. ..... Bay City
Chapin, Mrs. F. J. ..... Bay City
Connelly, Mrs. C. J. ..... Essexville
Cooke, Mrs. Hugh K. ..... Bay City
Cousens, Mrs. S. H. ..... Bay City
Crissy, Mrs. Robert ..... Bay City
Criswell, Mrs. Robert H. ..... Bay City
Dardas, Mrs. M. J. ..... Bay City
DeWaele, Mrs. ..... Bay City
Dumond, Mrs. V. H. ..... Bay City
Fisher, Mrs. Robert E. ..... Bay City
Foster, Mrs. L. Fernald ..... Bay City
Freel, Mrs. John A. ..... Bay City
Gale, Mrs. J. M. ..... Bay City
Gamble, Mrs. W. J., Jr. ..... Bay City
Hagelshaw, Mrs. G. L. ..... Bay City
Haitinger, Mrs. K. S. ..... Auburn
Hess, Mrs. C. L. ..... Bay City
Heuser, Mrs. H. N. ..... Bay City
Huckins, Mrs. E. S. ..... Bay City
Huckins, Mrs. Roger S. ..... Bay City
Husted, Mrs. F. Pitkin ..... Bay City
Horowitz, Mrs. F. S. ..... Bay City
Johnson, Mrs. Orlen J. ..... Bay City
Jones, Mrs. Culver ..... Essexville
Knobloch, Mrs. H. Howard ..... Bay City
MacRae, Mrs. L. D. ..... Bay City
McEwan, Mrs. J. H. ..... Bay City
Medvezky, Mrs. M. J. ..... Bay City
MacPhail, Mrs. J. C. ..... Bay City
Miller, Mrs. Edwin C. ..... Bay City
Moore, Mrs. Neal R. ..... Bay City
Mosier, Mrs. D. J. ..... Bay City
McLurg, Mrs. John ..... Bay City
Pearson, Mrs. S. M. ..... Bay City
Perkins, Mrs. Roy C. ..... Bay City
Reuter, Mrs. Clarence W. ..... Bay City
Reed, Mrs. William S. ..... Bay City
Ruggles, Mrs. F. E. ..... Bay City
Scrafford, Mrs. R. E. ..... Bay City
Shafer, Mrs. Harold C. ..... Bay City
Slattery, Mrs. M. R. ..... Bay City
Smith, Mrs. J. C. ..... Bay City
Stinson, Mrs. Walter S. ..... Bay City
Stuart, Mrs. Kenneth ..... Bay City
Tarter, Mrs. C. S. ..... Bay City
Urmston, Mrs. P. R. ..... Bay City
Vail, Mrs. Harry F. ..... Bay City
Wilcox, Mrs. James W. ..... Bay City
Wilson, Mrs. T. G. ..... Bay City
Zaremba, Mrs. A. J. ..... Bay City
Ziliak, Mrs. A. L. ..... Bay City

Berrien County

Bailey, Mrs. John ..... Benton Harbor
Bliesmer, Mrs. A. F. ..... St. Joseph
Conybeare, Mrs. Chadwick ..... Benton Harbor
Emery, Mrs. Clayton S. ..... St. Joseph
Fattic, Mrs. G. R. ..... Niles
Green, Mrs. Robert ..... Los Angeles, Cal.
Hanna, Mrs. Paul G. ..... St. Joseph
Hart, Mrs. Russel ..... Niles
Hershey, Mrs. Noel ..... Niles
Lindenfeld, Mrs. F. H. ..... Niles
Langraf, Mrs. Robert L. ..... Niles
Mitchell, Mrs. Carl A. ..... Benton Harbor
Moore, Mrs. Scott ..... Niles
Ozeran, Mrs. C. J. ..... Benton Harbor
Porter, Mrs. Charles ..... Benton Harbor
Pritchard, Mrs. Harold ..... Niles
Reagan, Mrs. Robert ..... Benton Harbor
Rice, Mrs. Franklin G. ..... Niles
Richmond, Mrs. Dean ..... St. Joseph
Ruth, Mrs. J. Griswold ..... Benton Harbor
Strayer, Mrs. J. C. ..... Buchanan
Strayer, Mrs. J. W. ..... Niles
Thorup, Mrs. Donald W. ..... Benton Harbor
Westervelt, Mrs. Herbert O. ..... Benton Harbor
Woodford, Mrs. Hackley E. ..... Benton Harbor

Branch County

Aldrich, Mrs. Napier Stearns ..... Coldwater
Andrews, Mrs. Frank Allin ..... Coldwater
Bien, Mrs. Walter Wm. John ..... Coldwater
Culver, Mrs. Bert W. ..... Coldwater
Culver, Mrs. Dean T. ..... Bronson
Fraser, Mrs. Robert James ..... Coldwater
French, Mrs. Merle R. ..... Coldwater
Gist, Mrs. L. (deceased) ..... Coldwater
Gomley, Mrs. Henry C. ..... Bronson
Johnson, Mrs. David B. ..... Coldwater
Leitch, Mrs. Robert Matthew ..... Union City
Mooi, Mrs. Henry Roy ..... Coldwater
Olmsted, Mrs. Kenneth Lader ..... Coldwater
Rennell, Mrs. Edwin James ..... Coldwater
Rees, Mrs. Kendall Brooks ..... Coldwater
Slosser, Mrs. Paul J. ..... Tekonsha
Thomas, Mrs. James Alanson ..... Coldwater
Walton, Mrs. Nathaniel John ..... Quincy
Weidner, Mrs. Harold Raleigh ..... Coldwater

Calhoun County

Amos, Mrs. N. H. ..... Battle Creek
Baribeau, Mrs. Roy ..... Battle Creek
Barden, Mrs. Stuart ..... Battle Creek
Bodine, Mrs. Harold ..... Battle Creek
Bonifer, Mrs. Philip ..... Battle Creek
Brainard, Mrs. Clifford ..... Battle Creek
Campbell, Mrs. Richard ..... Battle Creek
Capron, Mrs. M. J. ..... Battle Creek
Chynoweth, Mrs. W. R. ..... Battle Creek
Cooper, Mrs. J. E. ..... Battle Creek
Finch, Mrs. D. L. ..... Battle Creek
Fraser, Mrs. Robert ..... Battle Creek
Giddings, Mrs. A. M. ..... Battle Creek
Hansen, Mrs. E. L. ..... Battle Creek
Hansen, Mrs. Harvey ..... Battle Creek
Haughey, Mrs. Wilford ..... Hickory Corners
Hibbs, Mrs. D. K. ..... Battle Creek
Hills, Mrs. C. R. ..... Battle Creek
Hollands, Mrs. Robert ..... Battle Creek
Holtom, Mrs. B. G ..... Battle Creek
Hubly, Mrs. James ..... Battle Creek
Humphrey, Mrs. Arthur ..... Battle Creek
Jeffrey, Mrs. J. R. ..... Battle Creek
Keagle, Mrs. L. R. ..... Battle Creek
Kelleher, Mrs. George ..... Battle Creek
Kinde, Mrs. M. R. ..... Battle Creek
Kingsley, Mrs. Paul ..... Battle Creek
Kolvoord, Mrs. Theodore ..... Battle Creek
Lam, Mrs. Francis ..... Battle Creek
Levy, Mrs. Joseph ..... Battle Creek
Lowe, Mrs. Kenneth ..... Battle Creek
Lowe, Mrs. Stanley ..... Battle Creek
Meister, Mrs. F. O. ..... Battle Creek
Melges, Mrs. F. J. ..... Battle Creek
Mullenmeister, Mrs. Hugh ..... Battle Creek
Parkinson, Mrs. Charles ..... Battle Creek
Patrick, Mrs. Gilbert ..... Battle Creek
Pearson, Mrs. D. J. ..... Battle Creek
Robbert, Mrs. John ..... Battle Creek
Robins, Mrs. Hugh ..... Battle Creek
Royer, Mrs. Clark ..... Battle Creek
Schwarz, Mrs. Frank ..... Battle Creek
Swartz, Mrs. George ..... Battle Creek
Shipp, Mrs. Leland ..... Battle Creek
Simpson, Mrs. Robert ..... Battle Creek
Slagle, Mrs. George ..... Battle Creek
Sleight, Mrs. James ..... Battle Creek
Stadle, Mrs. Wendell ..... Battle Creek
Stiefel, Mrs. Richard ..... Battle Creek
Verity, Mrs. Lloyd ..... Battle Creek
Walters, Mrs. John ..... Battle Creek
Wencke, Mrs. Carl ..... Battle Creek
Winslow, Mrs. Sherwood ..... Battle Creek
Worgess, Mrs. Duane ..... Battle Creek
Zindler, Mrs. George ..... Bellevue

ROSTER

Delta-Schoolcraft Counties

Boyce, Mrs. Donald ..... Escanaba
Defnet, Mrs. Harry J. ..... Escanaba
Frenn, Mrs. Nathan ..... Back River
Harrison, Mrs. Wm. ..... Escanaba
Groos, Mrs. Louis ..... Escanaba
Hult, Mrs. Otto ..... Gladstone
LeMire, Mrs. William ..... Escanaba
LeMire, Mrs. Donald ..... Escanaba
Lindquist, Mrs. Norman ..... Escanaba
Miller, Mrs. A. H. ..... Gladstone
Walch, Mrs. J. J. ..... Escanaba

Dickinson-Iron Counties

Addison, Mrs. Earl R. ..... Crystal Falls
Alexander, Mrs. William H. ..... Iron Mountain
Carpenter, Mrs. Gilbert V. ..... Iron Mountain
Crowell, Mrs. J. A. ..... Iron Mountain
Cooper, Mrs. C. A. ..... Stambaugh
Huron, Mrs. W. H. ..... Iron Mountain
Lamb, Mrs. Ray ..... Niagara, Wis.
McCormick, Mrs. ..... Niagara, Wis.
McEachran, Mrs. Hugh D. ..... Iron Mountain
Menzies, Mrs. Clifford G. ..... Iron Mountain
Palm, Mrs. E. Theo. ..... Crystal Falls
Schlitter, Mrs. R. E. ..... Iron Mountain
Steinke, Mrs. Charles G. ..... Kingsford
Schroeder, Mrs. John ..... Iron Mountain

Eaton County

Brown, Mrs. B. Phillip ..... Charlotte
Carothers, Mrs. Daniel ..... Charlotte
DeLand, Mrs. C. L. ..... Bellevue
Engle, Mrs. Paul ..... Olivet
Goff, Mrs. Sidney B. (deceased) ..... Eaton Rapids
Hannah, Mrs. Harry W. ..... Charlotte
Myers, Mrs. A. W. ..... Potterville
Stimson, Mrs. C. A. (deceased) ..... Eaton Rapids
Stucky, Mrs. George C. ..... Charlotte
Van Ark, Mrs. Bert ..... Eaton Rapids
Van Ark, Mrs. Herman ..... Eaton Rapids
Willits, Mrs. C. O. ..... Charlotte

Genesee County

Adams, Mrs. Burnell ..... Flint
Anderson, Mrs. Harley ..... Mt. Morris
Andrews, Mrs. N. A. C. ..... Flushing
Anthony, Mrs. George ..... Flint
Backus, Mrs. Glenn ..... Flint
Barbour, Mrs. Fleming ..... Flint
Baird, Mrs. Claire ..... Flint
Baske, Mrs. Franklin ..... Flint
Bateman, Mrs. L. G. ..... Flint
Benson, Mrs. John, Jr. ..... Flint
Beyer, Mrs. Damon ..... Clio
Beyer, Mrs. George ..... Clio
Bird, Mrs. W. G. ..... Flint
Bishop, Mrs. D. L. ..... Flint
Blakely, Mrs. A. C. ..... Flint
Bogart, Mrs. Leon ..... Flint
Boles, Mrs. William ..... Flint
Bonathan, Mrs. A. T. ..... Flint
Branch, Mrs. Hira ..... Flint
Braside, Mrs. Donald ..... Flint
Bruce, Mrs. William ..... Swartz Creek
Buchanan, Mrs. William F. ..... Fenton
Clark, Mrs. C. P. ..... Flint
Collins, Mrs. James ..... Flint
Colwell, Mrs. Clifford ..... Flint
Connell, Mrs. J. T. ..... Flint
Conover, Mrs. George ..... Grand Blanc
Cook, Mrs. Henry ..... Flint
Credille, Mrs. Barney ..... Flint
Curry, Mrs. George ..... Flint
Curtin, Mrs. John H. ..... Flint
Cutler, Mrs. Campbell ..... Flint
Dickstein, Mrs. Bernard ..... Flint
Dimond, Mrs. E. G. ..... Flint
Drewyer, Mrs. Glenn ..... Rankin
Eichhorn, Mrs. Ernest ..... Flint
Eickhorst, Mrs. Thomas ..... Flint
Elliott, Mrs. H. B. ..... Flint
Farhat, Mrs. Maynard ..... Flint
Fee, Mrs. Manson ..... Flint
Flynn, Mrs. Southard ..... Flint
Gleason, Mrs. N. A. ..... Flint
Goodfellow, Mrs. B. F. ..... Flint
Gorne, Mrs. S. S. ..... Flint
Griffin, Mrs. Ernest ..... Flint
Grover, Mrs. H. F. ..... Flint
Guile, Mrs. Gurdon ..... Flint
Gutow, Mrs. Isadore ..... Flint
Gutow, Mrs. J. J. ..... Flint
Hague, Mrs. Robert ..... Flushing
Hamilton, Mrs. A. J. ..... Flint
Harper, Mrs. A. W. ..... Flint
Harper, Mrs. Homer ..... Flint
Hays, Mrs. George ..... Flint
Hiscock, Mrs. Harold ..... Flint
Hooper, Mrs. Kendall ..... Flint
Hubbard, Mrs. William ..... Flint
Hufton, Mrs. W. L. ..... Flint
Jermstad, Mrs. Robert ..... Flint
Johnson, Mrs. Frank ..... Flint
Judd, Mrs. Alvin ..... Flint
Kaleta, Mrs. Edward J. ..... Flint
Kaufman, Mrs. L. D. ..... Flint
Kirk, Mrs. Stella ..... Flint
Knapp, Mrs. Don ..... Flint
Knapp, Mrs. William ..... Flint
Kretchmar, Mrs. Arthur ..... Flint
Kurtz, Mrs. John J. ..... Flint
Limbach, Mrs. David ..... Fenton
Livesay, Mrs. Jackson ..... Flint
MacDuff, Mrs. R. Bruce ..... Flint
MacGregor, Mrs. Delbert ..... Flint
Macksood, Mrs. Joseph ..... Flint
Marsh, Mrs. H. ..... Flint
Marshall, Mrs. William ..... Flint
McLeod, Mrs. Kenneth ..... Flint
Miller, Mrs. Bryce ..... Flushing
Miller, Mrs. E. E. ..... Flint
Miner, Mrs. F. B. ..... Flint
Miltich, Mrs. Anthony ..... Flint
Moore, Mrs. Kenneth ..... Flint
Morrison, Mrs. William ..... Grand Blanc
Morrissey, Mrs. Vaughn ..... Flint
Morrish, Mrs. Ray ..... Flint
Mosier, Mrs. Edward ..... Flint
Odle, Mrs. I. D. ..... Flint
Orr, Mrs. Walter ..... Fenton
Osher, Mrs. Seymour L. ..... Flint
Pfeifer, Mrs. A. C. ..... Mt. Morris
Preston, Mrs. Otto ..... Flint
Randall, Mrs. Herbert ..... Flint
Rawlings, Mrs. J. Mott ..... Flint
Reeder, Mrs. F. E. ..... Flint
Richeson, Mrs. Verne ..... Flint
Rieth, Mrs. George F. ..... Flint
Rulney, Mrs. Max ..... Flint
Rundles, Mrs. Walter ..... Flint
Sandy, Mrs. Kenneth ..... Flint
Scavarda, Mrs. Charles ..... Flint
Schreiber, Mrs. Oscar ..... Flint
Searles, Mrs. Karl F. ..... Flint
Shantz, Mrs. Leighton ..... Flint
Sheeran, Mrs. Dan ..... Flint
Shipman, Mrs. Charles ..... Flint
Sirna, Mrs. Anthony ..... Flint
Smith, Mrs. D. C. ..... Flint
Smith, Mrs. Eugene ..... Flint
Smith, Mrs. M. J. ..... Flint
Sniderman, Mrs. Ben ..... Flint
Sparks, Mrs. Harvey ..... Flint
Steffe, Mrs. Ralph ..... Flint
Steinman, Mrs. Floyd ..... Flint
Stevenson, Mrs. William ..... Flint
Stroup, Mrs. Clayton ..... Flint
Tofteland, Mrs. Elmer ..... Flint
Treat, Mrs. D. L. ..... Flint
Tuuri, Mrs. Arthur L. ..... Flint
VanHarn, Mrs. Ray S. ..... Flint
Vary, Mrs. Edwin ..... Flint
Ware, Mrs. Frank ..... Flint
Wark, Mrs. D. R. ..... Flint
Wentworth, Mrs. John ..... Flint
White, Mrs. Herbert T. ..... Flint
Williams, Mrs. Silliam ..... Grand Blanc
Willoughby, Mrs. Gordon ..... Flint
Wills, Mrs. T. W. ..... Flint
Woughter, Mrs. Harold ..... Flint
Wright, Mrs. Donald ..... Flint
Wyman, Mrs. John ..... Grand Blanc
Willoughby, Mrs. L. L. ..... Flint

Grand Traverse-Leelanau-Benzie Counties

Bolan, Mrs. Ellis ..... Suttons Bay
Brownson, Mrs. Kneale ..... Traverse City
Brownson, Mrs. Jay ..... Kingsley
Bushong, Mrs. Benjamin ..... Traverse City
Carrow, Mrs. Flemming ..... Traverse City
Clark, Mrs. Charles ..... Traverse City
Ellis, Mrs. Claude ..... Suttons Bay
Gallagher, Mrs. William ..... Traverse City
Gauntlett, Mrs. James ..... Traverse City
Haberlein, Mrs. Charles ..... Traverse City
Hall, Mrs. James ..... Traverse City
Hamilton, Mrs. Earl ..... Traverse City
Huene, Mrs. Nevin ..... Traverse City
Hyslop, Mrs. William ..... Traverse City
Kyselka, Mrs. Harry ..... Traverse City
Lawton, Mrs. Percy ..... Traverse City
Lentz, Mrs. Robert ..... Traverse City
Lossman, Mrs. Robert ..... Traverse City
Nichols, Mrs. Merwin ..... Traverse City
Noyes, Mrs. Guy ..... Traverse City
Murphy, Mrs. Fred ..... Traverse City
Osterhagen, Mrs. Harold ..... Traverse City
Osterlin, Mrs. Mark ..... Traverse City
Pike, Mrs. Donald ..... Traverse City
Power, Mrs. Frank ..... Traverse City
Sheffer, Mrs. Marcus ..... Traverse City
Sladek, Mrs. Edward ..... Traverse City
Thirlby, Mrs. Edwin ..... Traverse City
Weitz, Mrs. Harry ..... Traverse City
Wilcox, Mrs. Paul ..... Traverse City
Zielke, Mrs. Irwin ..... Traverse City
Zimmerman, Mrs. Joseph ..... Traverse City

Gratiot-Isabella-Clare Counties

Barstow, Mrs. D. K. ..... St. Louis
Barstow, Mrs. W. E. ..... St. Louis
Bergin, Mrs. Joe ..... Alma
Davis, Mrs. L. L. ..... Mt. Pleasant
Graham, Mrs. B. J. ..... Alma
Hammerberg, Mrs. Kuno ..... Clare
Juhnke, Mrs. L. W. ..... Mt. Pleasant
MacArthur, Mrs. Stuart ..... Clare
Miller, Mrs. S. W. ..... Alma
Oldham, Mrs. Earl S. ..... Breckenridge
Rottschaffer, Mrs. John ..... Alma
Strange, Mrs. R. R. ..... Mt. Pleasant
Waggoner, Mrs. Richard ..... St. Louis
Woods, Mrs. Cornelius ..... Clare

Houghton-Baraga-Keweenaw Counties

Aldrich, Mrs. Addison B. .....Hancock
Aldrich, Mrs. Leonard C. .....Houghton
Baumgartner, Mrs. Wilbur W. ....Houghton
Brewington, Mrs. George F. ....Mohawk
Burke, Mrs. John J. .....Hubbell
Gallen, Mrs. George E. .....Hancock
Hillmer, Mrs. Russell E. .....Painesdale
Hosking, Mrs. Fred .....Laurium
Kolb, Mrs. Fred B. .....Calumet
LaBine, Mrs. Alfred .....Houghton
Lepisto, Mrs. Victor .....Laurium
Levin, Mrs. Simon .....Houghton
Manthei, Mrs. Willis A. .....Lake Linden
Murphy, Mrs. Percy J. .....Calumet
Roche, Mrs. Andrew C. .....Laurium
Roche, Mrs. Andrew M. .....Laurium
Rupprecht, Mrs. C. H. .....Laurium
Scott, Mrs. Benton, V. D. .....Chassell
Sloan, Mrs. Paul S. .....Houghton
Smith, Mrs. Charles R. .....Hancock
Stern, Mrs. Isador D. .....Houghton
Wickliffe, Mrs. Thomas P. .....Calumet
Winkler, Mrs. Henry J. .....L'Anse

Huron County

Bently, Mrs. M. D. .....Sebewaing
Dixon, Mrs. Ralph C. .....Pigeon
Gettel, Mrs. Roy .....Bad Axe
Harrington, Mrs. Charles .....Bad Axe
Lamb, Mrs. Harry .....Ubly
Oakes, Mrs. C. W. .....Harbor Beach
Ritsema, Mrs. John .....Sebewaing
Scheurer, Mrs. Clare A. .....Pigeon
Sorenson, Mrs. Maurice .....Kinde
Steinhardt, Mrs. Edward E. .....Elkton
Turner, Mrs. Phillip R. ....Harbor Beach
Weiss, Mrs. Arno .....Bad Axe
Whipple, Mrs. Arno .....Pigeon

Ingham County

Badgley, Mrs. W. O. .....Lansing
Bauer, Mrs. T. I. .....East Lansing
Bradford, Mrs. C. W. .....East Lansing
Breakey, Mrs. R. S. .....Lansing
Briede, Mrs. P. C. .....East Lansing
Brown, Mrs. F. W., Jr. .....Lansing
Brubaker, Mrs. K. B. .....Lansing
Burhans, Mrs. Robert .....East Lansing
Bevez, Mrs. Frank .....Lansing
Cummings, Mrs. G. D. .....Lansing
Cushman, Mrs. Frank .....Lansing
Darling, Mrs. L. H. .....Lansing
Davenport, Mrs. C. S. .....Lansing
Dean, Mrs. Carleton .....East Lansing
DeVries, Mrs. C. F. .....Lansing
Doyle, Mrs. C. P. .....Lansing
Drolett, Mrs. Donald .....Lansing
Folkers, Mrs. L. M. .....East Lansing
Fortino, Mrs. S. P. .....Lansing
Foust, Mrs. E. H. .....Lansing
French, Mrs. Horace L. .....Lansing
Gardner, Mrs. C. B. .....Lansing
Goldner, Mrs. R. E. .....Lansing
Harris, Mrs. H. W. .....Lansing
Harrison, Mrs. W. H. .....Lansing
Harrold, Mrs. J. F. .....Lansing
Hart, Mrs. L. C. .....Lansing
Hayford, Mrs. W. D. .....East Lansing
Haze, Mrs. H. A. .....Lansing
Heckart, Mrs. Frank B. .....Lansing
Hermes, Mrs. Ed. J. .....Lansing
Heustis, Mrs. A. E. .....East Lansing
Himmelberger, Mrs. R. J. .....Lansing
Hodges, Mrs. Kenneth P. .....Lansing
Isbister, Mrs. J. L. .....Lansing
Jacob, Mrs. S. S. .....East Lansing
Johnson, Mrs. Kenneth H. .....Lansing
Jones, Mrs. Francis, Jr. .....East Lansing
Kalmbach, Mrs. R. E. .....Lansing
Loree, Mrs. M. C. .....Lansing
McCrumb, Mrs. R. R. .....Lansing
McGillicuddy, Mrs. O. B. ....East Lansing
McGillicuddy, Mrs. Robert J. .....East Lansing
McIntyre, Mrs. J. Earl .....Lansing
Meade, Mrs. Robert .....East Lansing
Mercer, Mrs. W. E. .....East Lansing
Morrow, Mrs. Robert J. .....Lansing
Owen, Mrs. Florence B. .....East Lansing
Pinkham, Mrs. R. A. .....Lansing
Place, Mrs. E. H. .....Lansing
Robson, Mrs. E. J. .....East Lansing
Rozan, Mrs. Joe S. .....Okemos
Rozan, Mrs. Milton .....East Lansing
Rulison, Mrs. J. G. .....Lansing
Sanders, Mrs. John .....East Lansing
Schultz, Mrs. Arthur .....Lansing
Sharp, Mrs. Mahlon .....East Lansing
Sherman, Mrs. George A. ....East Lansing
Sichler, Mrs. H. G. .....Lansing
Silverman, Mrs. I. .....Lansing
Spencer, Mrs. C. T. .....East Lansing
Stanley, Mrs. A. L. .....East Lansing
Steiner, Mrs. S. D. .....East Lansing
Stiles, Mrs. Frank .....East Lansing
Swartz, Mrs. F. C. .....East Lansing
Tamblyn, Mrs. F. W. .....East Lansing
Trimby, Mrs. R. H. .....Lansing
VanderZalm, Mrs. T. P. .....Lansing
Wadley, Mrs. Ralph .....East Lansing
Wilenski, Mrs. Thomas .....East Lansing

Jackson County

Adams, Mrs. E. W.....Jackson
Ahronheim, Mrs. J. H.....Jackson
Alter, Mrs. R. H.....Jackson
Anderson, Mrs. W. B.....Jackson
Appel, Mrs. Saul.....Jackson
Baker, Mrs. G. M.....Parma
Beckwith, Mrs. S. A.....Stockbridge
Bullen, Mrs. G. R.....Jackson
Bindshedler, Mrs. B. S.....Jackson
Brown, Mrs. H. A.....Jackson
Brashares, Mrs. Z. A.....Brooklyn
Clarke, Mrs. C. S.....Jackson
Cooley, Mrs. R. M.....Jackson
Cooley, Mrs. Warren.....Jackson
Corley, Mrs. Cecil.....Jackson
Corley, Mrs. E. H.....Jackson
Cox, Mrs. Ferdinand.....Jackson
Culver, Mrs. G. D.....Stockbridge
DeMay, Mrs. C. E.....Jackson
DeMay, Mrs. J. D.....Jackson
Deming, Mrs. R. C.....Jackson
Dengler, Mrs. C. R.....Jackson
Enders, Mrs. W. H.....Jackson
Filip, Mrs. H. K.....Jackson
Finch, Mrs. Russell.....Jackson
Finton, Mrs. W. L.....Jackson
Finton, Mrs. R. E.....Jackson
Foust, Mrs. W. L.....Grass Lake
Growt, Mrs. B. H. .....Addison
Hackett, Mrs. T. L.....Jackson
Hanft, Mrs. C. F.....Springport
Hanna, Mrs. R. J.....Jackson
Hardie, Mrs. G. C.....Jackson
Harris, Mrs. L. J.....Jackson
Hicks, Mrs. G. C.....Jackson
Holst, Mrs. J. B.....Jackson
Holstein, Mrs. A. P.....Manchester
Hurley, Mrs. H. L.....Jackson
Keefer, Mrs. A. H.....Concord
Kudner, Mrs. D. F.....Jackson
Lake, Mrs. E. C.....Jackson
Lake, Mrs. W. H.....Jackson
Landron, Mrs. Daniel.....Jackson
Lathrop, Mrs. W. W.....Jackson
Leahy, Mrs. E. O.....Jackson
Leonard, Mrs. C. A.....Jackson
Lenz, Mrs. C. R.....Jackson
Lewis, Mrs. E. F.....Jackson
Linden, Mrs. V. E.....Jackson
Ludwick, Mrs. J. E.....Jackson
McLaughlin, Mrs. M. J.....Jackson
Meads, Mrs. J. B.....Jackson
Miller, Mrs. J. L. .....Jackson
Miller, Mrs. S. L.....Jackson
Munro, Mrs. C. D.....Jackson
Munro, Mrs. N. D. .....Jackson
Murphy, Mrs. B. M.....Jackson
Myers, Mrs. J. H. .....Jackson
Newton, Mrs. F. E.....Jackson
Oleksy, Mrs. S. P.....Jackson
Otis, Mrs. Grant L.....Jackson
Parker, Mrs. E. E.....Leslie
Paynes, Mrs. A. K.....Jackson
Peterson, Mrs. E. S.....Jackson
Phillips, Mrs. G. H.....Jackson
Porter, Mrs. H. W.....Jackson
Pray, Mrs. F. F.....Jackson
Pray, Mrs. G. R.....Jackson
Rice, Mrs. J. W.....Jackson
Ries, Mrs. R. G.....Jackson
Riley, Mrs. P. A. .....Jackson
Sargent, Mrs. L. E.....Jackson
Sautter, Mrs. W. A.....Horton
Schepler, Mrs. C. W.....Brooklyn
Schmidt, Mrs. T. E.....Jackson
Scott, Mrs. J. A.....Jackson
Shaeffer, Mrs. A. M.....Jackson
Shaeffer, Mrs. L. D.....Jackson
Sill, Mrs. H. W.....Jackson
Sirhal, Mrs. A. M.....Brooklyn
Smith, Mrs. D. W.....Jackson
Southwick, Mrs. W. A.....Springport
Stewart, Mrs. L. L.....Jackson
Stone, Mrs. E. L.....Jackson
Susskind, Mrs. M. V.....Jackson
Tate, Mrs. C. E.....Jackson
Taylor, Mrs. R. V.....Jackson
Thalner, Mrs. L. F.....Jackson
Thayer, Mrs. E. A.....Jackson
Thompson, Mrs. Tom B.....Jackson
Torwick, Mrs. E. T.....Jackson
Townsend, Mrs. J. W.....Vandercook Lake
VanSchoick, Mrs. Frank.....Jackson
VanSchoick, Mrs. J. D.....Hanover
VanWagnen, Mrs. F. I.....Jackson
Vivirski, Mrs. E. E.....Jackson
Wallace, Mrs. W. S.....Jackson
Wholihan, Mrs. John W.....Jackson
Wickham, Mrs. W. A.....Jackson
Winter, Mrs. G. E.....Jackson

Kalamazoo County

Aach, Mrs. Hugo.....Kalamazoo
Alexander, Mrs. C. A.....Kalamazoo
Andersen, Mrs. Glenn.....Kalamazoo
Andrews, Mrs. Sherman.....Kalamazoo
Appel, Mrs. William.....Kalamazoo
Armstrong, Mrs. Robert.....Kalamazoo
Banner, Mrs. Lawrence.....Kalamazoo
Barak, Mrs. Herbert.....Kalamazoo
Barry, Mrs. Manley.....Kalamazoo
Bennett, Mrs. C. L.....Kalamazoo
Bennett, Mrs. Keith.....Kalamazoo
Betz, Mrs. Eldean.....Kalamazoo
Birch, Mrs. William.....Kalamazoo
Bergman, Mrs. Wallace.....Kalamazoo
Boys, Mrs. C. E.....Kalamazoo
Brennerman, Mrs. James.....Galesburg
Brown, Mrs. I. W.....Kalamazoo
Burbidge, Mrs. Earl.....Parchment
Chrest, Mrs. C. P.....Kalamazoo
Cobb, Mrs. H. R.....Kalamazoo
Conrad, Mrs. Maynard .....Kalamazoo
Cook, Mrs. R. G.....Kalamazoo
Cooper, Mrs. Paul.....Kalamazoo
Crawford, Mrs. Kenneth.....Kalamazoo
Crane, Mrs. Bart.....Kalamazoo
Creager, Mrs. R. O. .....Kalamazoo
De Groat, Mrs. Albert.....Kalamazoo
Delbert, Mrs. Stewart.....Kalamazoo
DePree, Mrs. H. E.....Kalamazoo
Dew, Mrs. Robert.....Kalamazoo
Dowd, Mrs. Bernard.....Kalamazoo
Doyle, Mrs. Fred.....Kalamazoo
Fast, Mrs. Ralph.....Kalamazoo
Fath, Mrs. August.....Kalamazoo
Fepeane, Mrs. John.....Kalamazoo
Fuller, Mrs. Paul .....Kalamazoo
Gerstner, Mrs. Louis.....Kalamazoo
Green, Mrs. William.....Kalamazoo
Gregg, Mrs. Sherman.....Kalamazoo
Hammer, Mrs. John.....Kalamazoo
Hanson, Mrs. Curtis.....Kalamazoo
Hayner, Mrs. Russell.....Kalamazoo
Herbert, Mrs. Walter.....Richland
Hildreth, Mrs. Roscoe.....Kalamazoo
Hoebeke, Mrs. William.....Kalamazoo
Howard, Mrs. Grant.....Kalamazoo
Hubbell, Mrs. Reader.....Kalamazoo
Irwin, Mrs. William.....Kalamazoo

Jennings, Mrs. W. O.....Kalamazoo
Kilgore, Mrs. Robert.....Kalamazoo
Klerk, Mrs. William.....Kalamazoo
Lavender, Mrs. Howard.....Kalamazoo
Lawrence, Mrs. James.....Kalamazoo
Light, Mrs. R. U.....Kalamazoo
Light, Mrs. S. R.....Kalamazoo
Littig, Mrs. John.....Kalamazoo
Locklin, Mrs. W. Keye.....Kalamazoo
MacGregor, Mrs. John.....Parchment
MacDonald, Mrs. M. A.....Augusta
Machin, Mrs. Harold.....Kalamazoo
Malone, Mrs. James.....Kalamazoo
Margolis, Mrs. Frederick.....Kalamazoo
Marshall, Mrs. Don.....Kalamazoo
Marshall, Mrs. William P.....Kalamazoo
Martens, Mrs. Irwin.....Kalamazoo
Moe, Mrs. Rex.....Kalamazoo
Morter, Mrs. R. A.....Kalamazoo
Nell, Mrs. Edward.....Kalamazoo
Nibbelink, Mrs. Benjamin .....Kalamazoo
Patmos, Mrs. Martin.....Kalamazoo
Pearson, Mrs. O. E.....Kalamazoo
Peelen, Mrs. William.....Kalamazoo
Perry, Mrs. Cliff.....Kalamazoo
Prothro, Mrs. W. B.....Kalamazoo
Rasmussen, Mrs. Lee.....Vicksburg
Rigterink, Mrs. Gerald.....Kalamazoo
Roberts, Mrs. M. S.....Kalamazoo
Rockwell, Mrs. Donald.....Kalamazoo
Ryan, Mrs. Fred.....Kalamazoo
Schelten, Mrs. Roger.....Kalamazoo
Schier, Mrs. C. M.....Kalamazoo
Schrier, Mrs. Paul.....Kalamazoo
Scott, Mrs. William.....Kalamazoo
Shook, Mrs. Ralph.....Kalamazoo
Siemsen, Mrs. William.....Kalamazoo
Sisk, Mrs. W.N.....Kalamazoo
Sofen, Mrs. M. B.....Kalamazoo
Southworth, Mrs. Maynard.....Schoolcraft
Stiller, Mrs. Anthony.....Kalamazoo
Styker, Mrs. Homer.....Kalamazoo
Upjohn, Mrs. Gifford.....Kalamazoo
Upjohn, Mrs. L. N.....Kalamazoo
Vandervelde, Mrs. Kenneth.....Kalamazoo
Verhage, Mrs M. D.....Kalamazoo
Volderauer, Mrs. John.....Kalamazoo
Warnke, Mrs. R. D.....Kalamazoo
Westcott, Mrs. Leo.....Kalamazoo
Williamson, Mrs. Edwin.....Kalamazoo
Youngs, Mrs. C. A.....Kalamazoo

Kent County

Aitken, Mrs. George T.....Grand Rapids
Albers, Mrs. G. Donald.....Grand Rapids
Andre, Mrs. Harvey.....Grand Rapids
Aston, Mrs. William.....Grand Rapids
Avery, Mrs. Noyes L., Jr. ..Grand Rapids
Baert, Mrs. George H.....Grand Rapids
Baker, Mrs. A. J.....Grand Rapids
Ballard, Mrs. M. S.....Grand Rapids
Balyeat, Mrs. Gordon W.....Grand Rapids
Batts, Mrs. Martin.....Grand Rapids
Beaton, Mrs. James H. .....Grand Rapids
Beeman, Mrs. Carl B. .....Grand Rapids
Beets, Mrs. W. C.....Grand Rapids
Benjamin, Mrs. Howard A...Grand Rapids
Benson, Mrs. Roland R.....Grand Rapids
Blackburn, Mrs. H. M.....Grand Rapids
Boelkins, Mrs. Richard C...Grand Rapids
Boersma, Mrs. Donald.....Grand Rapids
Boet, Mrs. Frank.....Grand Rapids
Boet, Mrs. John T.....Grand Rapids
Brace, Mrs. Fred C.....Grand Rapids
Brink, Mrs. J. Russell.....Grand Rapids
Brook, Mrs. J. D.....Gradville
Buist, Mrs. Samuel J. .....Grand Rapids
Bull, Mrs. Frank.....Sparta
Burroughs, Mrs. Frank M., Jr.Grandville
Butler, Mrs. William J.....Grand Rapids
Campbell, Mrs. Alex. M.....Grand Rapids
Carpenter, Mrs. Luther C...Grand Rapids
Cayce, Mrs. William.....Grand Rapids
Chandler, Mrs. Donald.....Grand Rapids
Colvin, Mrs. W. G.....Grand Rapids
Corbus, Mrs. Burton R.....Grand Rapids
Crane, Mrs. Harold .....Grand Rapids
Cuncannon, Mrs. Ed. M.....Grand Rapids
Currier, Mrs. Fred P.....Grend Rapids
Damstra, Mrs. Harold J. ....Grand Rapids
Davis, Mrs. David B.....Grand Rapids
Dean, Mrs. Alfred.....Grand Rapids
DeBoer, Mrs. C. J. .....Grand Rapids
DeBoer, Mrs. Guy W.....Grand Rapids
DeMaagd, Mrs. G.....Rockford
DeMel, Mrs. Richard .....Grand Rapids
Denham, Mrs. R. H. .....Grand Rapids
DePree, Mrs. Joe.....Grand Rapids
DeVel, Mrs. Leon.....Grand Rapids
DeVries, Mrs. Daniel.....Grand Rapids
Dewey, Mrs. Kent A.....Grand Rapids
Diskey, Mrs. Donald.....Grand Rapids
Dixon, Mrs. Willis L.....Grand Rapids
Doctor, Mrs. Lubert.....Grand Rapids
Droste, Mrs. James.....Grand Rapids
Ducey, Mrs. E. F.....Grand Rapids
Eaton, Mrs. Robert M.....Grand Rapids
Fahlund, Mrs. G. T. R.....Grand Rapids
Failing, Mrs. John F.....Grand Rapids
Farber, Mrs. Charles E.....Grand Rapids
Faust, Mrs. L. W.....Grand Rapids
Fellows, Mrs. Kenneth.....Grand Rapids
Ferguson, Mrs. James.....Grand Rapids
Ferguson, Mrs. Lynn A.....Grand Rapids
Ferguson, Mrs. Ward S.....Grand Rapids
Ferrand, L. G.....Rockford
Fitts, Mrs. Ralph L.....Grand Rapids
Foshee, Mrs. J. C.....Grand Rapids
Frantz, Mrs. Charles H.....Grand Rapids
Fuller, Mrs. E. H.....Grand Rapids
Fuller, Mrs. William J.....Grand Rapids
Gamm, Mrs. Kenneth E.....Grand Rapids
Gibbs, Mrs. Floyd F.....Grand Rapids
Gilbert, Mrs. R. H.....Grand Rapids
Gillett, Mrs. O. H.....Grand Rapids
Grant, Mrs. Lee O.....Grand Rapids
Grant, Mrs. P. T.....Grand Rapids
Grass, Mrs. Edward J.....Grand Rapids
Gray, Mrs. Fred B.....Grand Rapids
Griffith, Mrs. Lucian S.....Grand Rapids
Haeck, Mrs. William.....Grand Rapids
Haeck, Mrs. William F. ....Grand Rapids
Hagerman, Mrs. David B...Grand Rapids
Heetderks, Mrs. Dewey R.....Grand Rapids
Henry, Mrs. James.....Grand Rapids
Hill, Mrs. A. Morgan.....Grand Rapids
Hodgen, Mrs. John T.....Grand Rapids
Hoffs, Mrs. Albertus.....Grand Rapids
Holcomb, Mrs. J. Winslow..Grand Rapids
Hollander, Mrs. Stephen.....Grand Rapids
Hoogerhyde, Mrs. Jack.....Grand Rapids
Hufford, Mrs. Alvin B.....Grand Rapids
Hyland, Mrs. William A.....Grand Rapids
Ireland, Mrs. H. D.....Grand Rapids
Irwin, Mrs. Thomas C.....Grand Rapids
Jamison, Mrs. Fred.....Grand Rapids
Jaracz, Mrs. Walter J. .....Grand Rapids
Jarvis, Mrs. Charles.....Grand Rapids
Jellema, Mrs. John F.....Holland
Jones, Mrs. Horace C.....Grand Rapids
Johnston, Mrs. William L...Grand Rapids
Kemmer, Mrs. Thomas.....Grand Rapids
Kelly, Mrs. Edward F.....Grand Rapids
Klaus, Mrs. C. D.....Grand Rapids
Kniskern, Mrs. Paul W.....Grand Rapids
Kooistra, Mrs. Henry P.....Grand Rapids
Kreulen, Mrs. Henry J.....Grand Rapids
Krupp, Mrs. Christian G.....Grand Rapids
Lentini, Mrs. Joseph.....Grand Rapids
Lieffers, Mrs. Harry.....Grand Rapids
List, Mrs. Carl.....Grand Rapids
MacIntyre, Mrs. Donald S...Grand Rapids
Marsh, Mrs. John P.....Grand Rapids
Maurits, Mrs. Reuben.....Grand Rapids
McKenna, Mrs. Joseph L.....Grand Rapids
McKinley, Mrs. L. M. .....Ada
McDougal. Mrs. William J., Grand Rapids
Meade, Mrs. Richard.....Grand Rapids
Miller, Mrs. J. D.....Grand Rapids
Miller, Mrs. J. J.....Marne
Mitchell, Mrs. W. B.....Grand Rapids
Moleski, Mrs. Joseph V.....Grand Rapids
Moleski, Mrs. Leo.....Grand Rapids
Moll, Mrs. A. M.....Grand Rapids
Montgomery, Mrs. John.....Grand Rapids
Mouw, Mrs. Dirk.....Grand Rapids
Mulder, Mrs. J. D.....Grand Rapids
Murphy, Mrs. Miles.....Grand Rapids
Nanzig, Mrs. Reinard .....Grand Rapids
Nickel, Mrs. Kenneth.....Grand Rapids
Northouse, Mrs. Peter B.....Grand Rapids
Notier, Mrs. Victor A.....Grand Rapids
Oliver, Mrs. W. W.....Grand Rapids
Olson, Mrs. John R.....Grand Rapids
Paalman, Mrs. Russel.....Grand Rapids
Patterson, Mrs. P. W.....Grand Rapids
Payne, Mrs. C. Allen.....Grand Rapids
Pearson, Mrs. Glenn A.....Grand Rapids
Plekker, Mrs. J. D.....Grand Rapids
Posthuma, Mrs. Albert.....Grand Rapids
Pott, Mrs. A. L.....Grand Rapids
Pyle, Mrs. J. Henry .....Grand Rapids
Quirk, Mrs. Edmund J.....Grand Rapids
Ragsdale, Mrs. L. V.....Grand Rapids
Ralph, Mrs. L. Paul.....Grand Rapids
Rasmussen, Mrs. R. A.....Grand Rapids
Reed, Mrs. Terrance.....Grand Rapids
Reuss, Mrs. William.....Grand Rapids
Rigterink, Mrs. John W.....Grand Rapids
Riley, Mrs. George L.....Grand Rapids
Robinson, Mrs. Harold C.....Grand Rapids
Rodgers, Mrs. William.....Grand Rapids
Rosenzweig, Mrs. Leonard....Grand Rapids
Roth, Mrs. Emil.....Grand Rapids
Ryan, Mrs. John.....Grand Rapids
Schaubel, Mrs. H. J.....Grand Rapids
Schermerhorn, Mrs. L. J.....Grand Rapids
Schnoor, Mrs. Elmer W.....Grand Rapids
Schuitema, Mrs. D. M.....Grand Rapids
Scott, Mrs. W. B.....Grand Rapids
Sevey, Mrs. Leon E.....Grand Rapids
Shellman, Mrs. M. W.....Grand Rapids
Shepard, Mrs. B. H.....Lowell
Sidell, Mrs. Chester.....Grand Rapids
Sidell, Mrs. Richard H.....Grand Rapids
Slemmons, Mrs. C. C.....Grand Rapids
Sluyter, Mrs. J. S.....Grand Rapids
Smith, Mrs. A. Brooks.....Grand Rapids
Smith, Mrs. R. Earle.....Grand Rapids
Smith, Mrs. Richard R.....Grand Rapids
Smith, Mrs. Robert B.....Grand Rapids
Snapp, Mrs. Carl F.....Grand Rapids
Snyder, Mrs. C. H.....Grand Rapids
Southwick, Mrs. G. H.....Grand Rapids
Steffensen, Mrs. W. H.....Grand Rapids
Stonehouse, Mrs. G. G.....Grand Rapids
Stover, Mrs. Virgil E.....Grand Rapids
Stuart, Mrs. G. J.....Grand Rapids
Swenson, Mrs. Harold C.....Grand Rapids
TenHave, Mrs. John.....Grand Rapids
Tesseine, Mrs. A. J.....Grand Rapids
Thompson, Mrs. Ed. C.....Grand Rapids
Thompson, Mrs. F. D.....Grand Rapids
Thomson, Mrs. John W.....Grand Rapids
Tidey, Mrs. Marcus B.....Grand Rapids
Tiffany, Mrs. Joseph.....Grand Rapids
Torgerson, Mrs. Wm. R.....Grand Rapids
Truog, Mrs. C. Peter.....Grand Rapids
Uthoff, Mrs. Carl.....Grand Rapids
Van Belois, Mrs. H. J.....Grand Rapids
Van Bree, Mrs. R. S. .....Grand Rapids
Van Duine, Mrs. Henry J...Grand Rapids
Van Noord, Mrs. G. A.....Grand Rapids
Van Pernis, Mrs. Paul A.....Grand Rapids
Van Solkema, Mrs. Andrew..Grand Rapids
Van Woerkom, Mrs. D.....Grand Rapids
Van Zwalenberg, Mrs. B. R.....Grand Rapids
Veldman, Mrs. H. E.....Grand Rapids
Venema, Mrs. Jay R.....Grand Rapids
Vis, Mrs. William R.....Grand Rapids
Warmenhoven, Mrs. Simon..Grand Rapids
Webb, Mrs. R. F.....Grand Rapids
Wells, Mrs. Merrill.....Grand Rapids
Wenger, Mrs. A. Verne.....Grand Rapids
Wenger, Mrs. John N.....Coopersville
Whinery, Mrs. J. B.....Grand Rapids
Wilkes, Mrs. John B.....Grand Rapids
Willitts, Mrs. Paul W.....Grand Rapids
Winter, Mrs. Garret E.....Grand Rapids
Wright, Mrs. John Mill.....Grand Rapids
Wurz, Mrs. John F.....Grand Rapids

Lapeer County

Biggs, Mrs. Robert.....North Branch
Best, Mrs. Ada.....Lapeer
Braidwood, Mrs. Sadie .....Lapeer
Chapin, Mrs. Clarence.....Columbiaville
Dorland, Mrs. Clarke.....Lapeer
Doty, Mrs. James .....Lapeer
Hunter, Mrs. Frances.....Lapeer
Hunter, Miss Mary Ellen.....Lapeer
Kiehle, Mrs. Anna.....Lapeer
Lass, Mrs. Edward.....Lapeer
McBride, Mrs. John.....Lapeer
O'Brien, Mrs. Daniel.....Lapeer
Rehn, Mrs. Adolph.....Lapeer
Smith, Mrs. Glenn.....Imlay City
Thomas, Mrs. Orville.....North Branch
Zemmer, Mrs. Harry.....Lapeer
Zolliker, Mrs. Carl.....Imlay City

Macomb County

Banting, Mrs. Oswald F.....Richmond
Barker, Mrs. John G.....St. Clair Shores
Bower, Mrs. Allen B.....Armada
Brady, Mrs. Milo J.....Detroit
Bryce, Mrs. James W.....Centerline
Buckley, Mrs. Daniel J.....Mt. Clemens
Crawford, Mrs. Alphonse M.....Romeo
Croman, Mrs. Joseph M.....Mt. Clemens
Dudzinski, Mrs. E. J.....New Baltimore
Engels, Mrs. John A.....Richmond
Goldman, Mrs. Bernard J. ....Mt. Clemens
Heine, Mrs. Austin W.....Mt. Clemens
Juliar, Mrs. Joseph F.....Mt. Clemens
Kane, Mrs. William J.....Mt. Clemens
Lynch, Mrs. Russell E.....Grosse Pointe
Moore, Mrs. George F.....Mt. Clemens
Mulligan, Mrs. Philip T.....Mt. Clemens
Peltier, Mrs. Stanley.....Mt. Clemens
Persson, Mrs. G. A.....Mt. Clemens
Reichman, Mrs. Joseph J.....Mt. Clemens
Reitzel, Mrs. Rufus H.....Mt. Clemens
Revere, Mrs. Joseph O. .....Mt. Clemens
Rivard, Mrs. Charles F.....St. Clair Shores
Rothman, Mrs. Arthur.....East Detroit
Ruedisueli, Mrs. Clarence.....Detroit
Salot, Mrs. Russell E.....Mt. Clemens
Scher, Mrs. Joseph N.....Mt. Clemens
Scher, Mrs. Sydney.....Mt. Clemens
Siegfried, Mrs. Edward G.....Mt. Clemens
Singer, Mrs. Nelson .....East Detroit
Smith, Mrs. Milton C.....Mt. Clemens
Stryker, Mrs. Oscar D.....St. Clair Shores
Sturm, Mrs. Frederick A.....Grosse Pointe
Thompson, Mrs. Alfred.....Mt. Clemens
Ullrich, Mrs. Russell W.....Mt. Clemens
Wellard, Mrs. Henry C.....New Baltimore
Whitley, Mrs. Alec.....St. Claire Shores
Wiley, Mrs. Duncan B.....Utica
Wolfson, Mrs. Victor H.....Mt. Clemens

Manistee County

Dart, Mrs. Ralph (widow) .....Manistee
Grant, Mrs. Charles L.....Manistee
Hansen, Mrs. Ernest C.....Manistee
Konopa, Mrs. John F.....Manistee
McLarty, Mrs. Madge (widow) ..Manistee
MacMullen, Mrs. Berndine (widow)....
.....Manistee
Miller, Mrs. Ernest B.....Manistee
Norconk, Mrs. Ward.....Bear Lake
Oakes, Mrs. Ellery A.....Manistee
Ogilvie, Mrs. Gordon D.....Manistee
Ramsdell, Mrs. Homer A.....Manistee
Ramsdell, Mrs. Louise (widow), Manistee
Rowe, Mrs. Robert E.....Manistee
Switzer, Mrs. L. W.....Manistee

Mason County

Bacon, Mrs. Herbert G. .....Scottville
Boldyreff, Mrs. Ephraim B.....Custer
Hoffman, Mrs. Howard H.....Ludington
Lintner, Mrs. Roy C.....Ludington
Martin, Mrs. William S.....Ludington
Ostrander, Mrs. Robert A.....Ludington
Paukstis, Mrs. Charles A.....Ludington
Scott, Mrs. Robert R.....Ludington
Slaybaugh, Mrs. James C.....Ludington
Spencer, Mrs. Clayton M.....Scottville
Switzer, Mrs. G. O.....Ludington

Mecosta-Osceola-Lake Counties

Bruggema, Mrs. Jacob.....Evart
Chess, Mrs. Leo F.....Reed City
Campbell, Mrs. J. B.....Big Rapids
Franklin, Mrs. Benjamin .....Remus
Ivkovich, Mrs. Paul.....Reed City
Kelsey, Mrs. Lee F.....Lakeview
Kilmer, Mrs. David.....Reed City
Kilmer, Mrs. Paul B.....Reed City
Kowaleski, Mrs. Edward.....Remus
McEwen, Mrs. Mary.....Big Rapids
MacIntyre, Mrs. Donald.....Big Rapids
Marston, Mrs. L. L. .....Lakeview
Merlo, Mrs. Frank A.....Big Rapids
Miller, Mrs. Charles S.....Big Rapids
Mitchell, Mrs. Harold C.....Big Rapids
Nelson, Mrs. Lorenzo.....Baldwin
Peck, Mrs. Louis K.....Barryton
Treynor, Mrs. Thomas P.....Big Rapids
Van Auken, Mrs. Ed. P. .....Big Rapids
White, Mrs. J. A.....Big Rapids
Yee, Mrs. Gordon H.....Big Rapids

Menominee County

Brukardt, Mrs. Herman R.....Menominee
Dewane, Mrs. Francis J.....Menominee
Dewane, Mrs. James N.....Menominee
Heidenreich, Mrs. John R. .....Daggett
Higley, Mrs. Richard A.....Menominee
Jones, Mrs. William S., Jr.....Menominee
Jones, Mrs. William S., Sr.....Menominee
Kerwell, Mrs. K. C.....Daggett
Peterson, Mrs. A. R.....Daggett
Whitemarsh, Mrs. Thomas.....Stephenson

Midland County

Ballmer, Mrs. Robert.....Midland
Bowsher, Mrs. Robert.....Midland
Bulmer, Mrs. Dan.....Midland
Buskirk, Mrs. Maurice.....Midland
Carsons, Mrs. T. H.....Midland
Gay, Mrs. Harold.....Midland
Gordon, Mrs. Harold.....Freeland
Gronemeyer, Mrs. William.....Midland
High, Mrs. C. V., Sr. .....Midland
Howe, Mrs. Irvin.....Midland
Ittner, Mrs. Martin.....Midland
Kaasa, Mrs. Lauren.....Midland
Lansborough, Mrs. D. R.....Midland
Linsenman, Mrs. Carl.....Midland
MacCallum, Mrs. Charles.....Midland
Maynard, Mrs. William.....Coleman
Meisel, Mrs. Edwin.....Midland
Pike, Mrs. Melvin.....Midland
Poznak, Mrs. Leonard.....Midland
Rice, Mrs. Robert.....Midland
Sherk, Mrs. Joseph.....Midland
Sjolander, Mrs. G.....Midland

Muskegon County

August, Mrs. R. V.....Muskegon Heights
Beers, Mrs. Charles W.....Muskegon
Benedict, Mrs. A. L.....Muskegon Heights
Bolthouse, Mrs. Robert.....Muskegon
Boyd, Mrs. DeVere R. .....Muskegon
Bradshaw, Mrs. Park S. ..North Muskegon
Busard, Mrs. J. Max.....Muskegon
Busard, Mrs. R. I. (widow).....Muskegon
Christopherson, Mrs. James.....Muskegon
Clapp, Mrs. Henry.....Muskegon
Clark, Mrs. Harry.....Muskegon
Closz, Mrs. Harold.....Muskegon
Cramer, Mrs. J. T. (widow).....Muskegon
Dasler, Mrs. Adolph.....Muskegon
Dykhuizen, Harold.....Muskegon
Ellis, Mrs. Nicholas J.....Muskegon
Emerick, Mrs. Robert....Muskegon Heights
Fleischman, Mrs. Charles B.....Muskegon
Gaikema, Mrs. Ed. W.....North Muskegon
Garber, Mrs. Frank. W.....North Muskegon
Gillard, Mrs. James L.....Muskegon
Greene, Mrs. Henry P.....Muskegon
Griffith, Mrs. Robert M.....Muskegon
Hannum, Mrs. Frank W.....Muskegon
Harryman, Mrs. James.....Muskegon
Hartwell, Mrs. Shattuck.....Muskegon
Heneveld, Mrs. Edward.....Muskegon
Heneveld, Mrs. John.....Muskegon
Heneveld, Mrs. Robert.....Muskegon
Holly, Mrs. Leland.....Muskegon
Hotvedt, Mrs. Laura.....Muskegon
Jiroch, Mrs. John.....Muskegon
Joistad, Mrs. Arthur.....North Muskegon
Kane, Mrs. Thomas J.....Muskegon
Kerr, Mrs. Howard J.....Muskegon
Lapham, Mrs. Landon.....Whitehall
Lauretti, Mrs. Emil J.....Muskegon
Laurin, Mrs. Vilda S.....Muskegon
LeFevre, Mrs. Louis.....North Muskegon
LeFevre, Mrs. William.....Muskegon
Loder, Mrs. Lou L.....Muskegon
McNair, Mrs. John.....Muskegon Heights
Medema, Mrs. Paul.....Muskegon
Meengs, Mrs. Marvin.....Muskegon
Mulligan, Mrs. Allen .....Muskegon
Prentice, Mrs. Edward W.....Muskegon
Risk, Mrs. Robert A.....Muskegon
Risk, Robert D.....Muskegon
Sears, Mrs. Richard.....Muskegon
Scholle, Mrs. Norbert.....Muskegon
Shebasta, Mrs. Emil M.....Muskegon
Smith, Mrs. Lemter, ...Muskegon
Swarthout, Mrs. Walter C.....
.....North Muskegon
Swenson, Mrs. Leland L.....Muskegon
Tiefer, Mrs. Charles A.....Muskegon
Tellman, Mrs. H. Clay.....Muskegon
Tyler, Mrs. William.....North Muskegon
Wagenaar, Mrs. Edward.....Muskegon
White, Mrs. W. Gardner.....Muskegon
Wiersma, Mrs. Silas C.....Muskegon
Wildgen, Mrs. Bernard C.....Muskegon
Wilson, Mrs. Pitt.....Muskegon

Newaygo County

Black, Mrs. Benjamin F.....Fremont
Cook, Mrs. J. Maxwell.....Newaygo
Geelings, Mrs. Jambert J. .....Fremont
Geerlings, Mrs. Willis.....Fremont
Harris, Mrs. Dean W.....Fremont
Klein, Mrs. J. Paul.....Fremont
Masters, Mrs. Brooker L.....Fremont
O'Neil, Mrs. Jon W.....Fremont
Tompsett, Mrs. Arthur, Sr.....Hesperia

North Central Counties

Beebe, Mrs. R. J.....West Branch
Boehm, Mrs. John D.....West Branch
Clippert, Mrs. C. G.....Grayling
Coulter, Mrs. K. D.....Gladwin
Gehman, Mrs. J. R.....Fairview
Hasty, Mrs. Earl.....West Branch
Hayes, Mrs. L. F.....Grayling
Henig, Mrs. B. Elmore.....Grayling
Hoenig, Mrs. Andrew.....Mancelona
Jardine, Mrs. Hugh N.....West Branch
Keyport, Mrs. C. R.....Grayling
Libke, Mrs. R. S.....Grayling
Martzowka, Mrs. M. A.....Roscommon
McDowell, Mrs. D. B.....West Branch
McKillop, Mrs. Gordon.....Gaylord
Peckham, Mrs. R. C.....Gaylord
Schaiberger, Mrs. George.....West Branch
Stealey, Mrs. Stanley.....Grayling
Timreck, Mrs. H. A.....Gladwin

Oakland County

Abbott, Mrs. Vernon C.....Pontiac
Arnkoff, Mrs. Harry.....Pontiac
Aschenbrenner, Mrs. Zae.....Farmington
Baker, Mrs. Robert.....Pontiac
Barker, Mrs. Howard B.....Bloomfield Hills
Bauer, Mrs. Edward G.....Hazel Park
Blakeney, Mrs. James.....Pontiac
Boucher, Mrs. Roman.....Royal Oak
Bradley, Mrs. E. L.....Pontiac
Campbell, Mrs. Malcolm.....Pleasant Ridge
Cefai, Mrs. A. F.....Pontiac
Cobb. Mrs. Leon.....Pontiac
Cobb, Mrs. Thomas.....Pontiac
Collins, Mrs. E. F.....Pontiac
Crissman, Mrs. H. C. .....Ferndale
Cudney, Mrs. Ethan.....Pontiac
Currier, Mrs. Richard .....Pontiac
Deutsch, Mrs. William.....Royal Oak
Dobski, Mrs. Edwin.....Pontiac
Ekelund, Mrs. C. T.....Pontiac
Endress, Mrs. Zac F.....Pontiac
Farnham, Mrs. Lucius.....Pontiac
Fink, Mrs. Jerome.....Pontiac
Foust, Mrs. Earl.....Hazel Park
Gaensbauer, Mrs. Ferdinand.....Pontiac
Gatley, Mrs. C. F.....Pontiac
Gehringer, Mrs. Norman.....Pontiac
German, Mrs. Nettie.....Pontiac
Gill, Mrs. Matthew.....Pontiac
Goode, Mrs. Norman.....Ferndale
Hackett, Mrs. Daniel.....Pontiac
Haddock, Mrs. Douglas.....Pontiac
Harsh, Mrs. Robert.....Pontiac
Hendren, Mrs. O. S.....Birmingham
Howlett, Mrs. E. V.....Pontiac
Hoyt, Mrs. D. F.....Pontiac
Kemp, Mrs. Felix.....Pontiac
Koehler, Mrs. William.....Royal Oak
Lewis, Mrs. Sol.....Ferndale
Markley, Mrs. J. M.....Pontiac
Mehas, Mrs. Constantine.....Pontiac
Miller, Mrs. A. V.....Royal Oak
Miller, Mrs. Hazen .....Royal Oak
Miller Mrs. Sidney.....Birmingham
Mitchell, Mrs. B. M.....Pontiac
Murtha, Mrs. A. V. .....Pontiac
Olsen, Mrs. Richard.....Pontiac
Pauli, Mrs. T. H.....Pontiac
Palmer, Mrs. Hayden.....Pontiac
Petroff, Mrs. George.....Pontiac
Porritt, Mrs. Ross.....Pontiac
Riggs, Mrs. Harry.....Pontiac
Riker, Mrs. A. D.....Pontiac
Russell, Mrs. V. P.....Pleasant Ridge
Rava, Mrs. Joseph.....Pontiac
Schunemen, Mrs. Howard.....Royal Oak
Seaborn, Mrs. A. J.....Royal Oak
Shadley, Mrs. M. L.....Pontiac
Simpson, Mrs. E. K.....Pontiac
Smith, Mrs. Don.....Pontiac
Spencer, Mrs. L. H.....Royal Oak
Spoehr, Mrs. E.....Pleasant Ridge
Spohn, Mrs. Earle.....Royal Oak
Stahl, Mrs. Harold.....Oxford
Stanley, Mrs. W. R.....Pleasant Ridge
Steinberg, Mrs. N. M...Huntington Woods
Sutton, Mrs. Palmer.....Royal Oak
Van Haltern, Mrs. H. L.....Pontiac
Wessels, Mrs. Robert.....Birmingham
Wigent, Mrs. Ralph.....Pontiac
Williams, Mrs. John.....Pontiac

Ottawa County

Beernink, Mrs. E.....Grand Haven
Bloemendal, Mrs. W. B.....Grand Haven
DeYoung, Mrs. F. W.....Grand Haven
Groat, Mrs. F.....Grand Haven
Kools, Mrs. W.....Holland
Rypkema, Mrs. W.....Grand Haven
VanderBerg, Mrs. E.....Holland
Wells, Mrs. K. .....Grand Haven
Winter, Mrs. S. J.....Holland

Saginaw County

Ackerman, Mrs. Gerald L.....Saginaw
Anderson, Mrs. William K.....Saginaw
Bishop, Mrs. H. Mortimer.....Saginaw
Bruton, Mrs. Martin F.....Saginaw
Bucklin, Mrs. Robert V.....Saginaw
Bullington, Mrs. Bert M.....Saginaw
Busch, Mrs. Frank J.....Saginaw
Butler, Mrs. Milton G.....Saginaw
Cady, Mrs. Frederick J.....Saginaw
Cambridge, Mrs. Vernal W.....Saginaw
Cameron, Mrs. Allan K.....Saginaw
Campbell, Mrs. Lloyd A.....Saginaw
Chisena, Mrs. Peter R.....Bridgeport
Claytor, Mrs. Archaer A.....Saginaw
Cortopassi, Mrs. Andre J.....Saginaw
Cortopassi, Mrs. Vital E.....Saginaw
Cory, Mrs. Charles W.....Saginaw
Curts, Mrs. James H.....Saginaw
Durman, Mrs. Donald C.....Saginaw
Galsterer, Mrs. Edwin C.....Saginaw
Gardner, Mrs. Joe H.....Saginaw
Gomon, Mrs. Louis D.....Saginaw
Hand, Mrs. Eugene A.....Saginaw
Harvie, Mrs. Lloyd C.....Saginaw
Heavenrich, Mrs. Robert M.....Saginaw
Helmkamp, Mrs. Herbert O.....Saginaw
Hester, Mrs. Eustace G.....Saginaw
Hill, Mrs. Victor L.....Saginaw
Hutcheson, Mrs. John.....Saginaw
Howell, Mrs. Donald M.....Saginaw
Jaenichen, Mrs. Robert.....Saginaw
James, Mrs. John W.....Saginaw
Jiroch, Mrs. Ralph.....Saginaw
Johnston, Mrs. Kermit T.....Saginaw
Kempton, Mrs. Rockwell.....Saginaw
Kerr, Mrs. William B.....Saginaw
Keyes, Mrs. James T. .....Birch Run
Kickham, Mrs. Edward F.....Saginaw
Kolesar, Mrs. Robert C.....Saginaw
Kowals, Mrs. Francis V.....Saginaw
Kretchmer, Mrs. Thomas V. .....Saginaw
LaPorte, Mrs. Lawrence A. .....Saginaw
Lohr, Mrs. Oliver W.....Saginaw
Luger, Mrs. Frederick.....Saginaw
Lyle, Mrs. Richard C.....Bridgeport
McKinney, Mrs. Alexander R.....Saginaw
McLandress, Mrs. Joshua A.....Saginaw
MacKinnon, Mrs. Edwin D.....Saginaw
MacMeekin, Mrs. James W.....Saginaw
Manning, Mrs. John E.....Saginaw
Markey, Mrs. Francis L.....Saginaw
Martzowka, Mrs. William P. .....Saginaw
Matthews, Mrs. Harry C.....Saginaw
Maurer, Mrs. Edith.....Saginaw
Maurer, Mrs. John .....Saginaw
Mayne, Mrs. Harold E.....Saginaw
Meyer, Mrs. Henry J.....Bridgeport
Moon, Mrs. A. Raymond.....Saginaw
Morgrette, Mrs. Leonard.....Saginaw
Morris, Mrs. K. M.....Saginaw
Mudd, Mrs. Richard D. .....Saginaw
Murphy, Mrs. Albert P.....Saginaw
Murray, Mrs. Charles R.....Saginaw
Murray, Mrs. Morris J.....Saginaw
Nelson, Mrs. Oscar A.....Saginaw
Northway, Mrs. Robert O.....Saginaw
Novy, Mrs. Frank O.....Saginaw
Olson, Mrs. Carl Porter.....Saginaw
Ostrander, Mrs. Frank W.....Freeland
Phillips, Mrs. Homer A.....Saginaw
Pietz, Mrs. Frederick.....Saginaw
Poole, Mrs. Frank A.....Saginaw
Potvin, Mrs. Clifford D.....Saginaw
Powers, Mrs. Robert F.....Saginaw
Richards, Mrs. Ned W.....Saginaw
Richter, Mrs. E. P.....Saginaw
Richter, Mrs. Harry J.....Saginaw
Roggen, Mrs. Ivan J.....Saginaw
Ryan, Mrs. Michael D.....Saginaw
Ryan, Mrs. Richard S.....Saginaw
Sample, Mrs. John T.....Saginaw
Sharp, Mrs. Martin C.....Saginaw
Sheldon, Mrs. Suel A.....Saginaw
Siler, Mrs. Delbert E.....Saginaw
Slack, Mrs. Walter K.....Saginaw
Stahley, Mrs. Edward H.....Saginaw
Stander, Mrs. Aaron C.....Saginaw
Stewart, Mrs. George W.....Saginaw
Sulfridge, Mrs. Hugh L., Jr.....Saginaw
Thompson, Mrs. Arthur B.....Saginaw
Topp, Mrs. Edwin W.....Saginaw
Toshach, Mrs. Clarence E.....Saginaw
Volk, Mrs. Vladimir K.....Saginaw
Watson, Mrs. Elsie.....Saginaw
Westlund, Mrs. Norman .....Saginaw
Wright, Mrs. Edwin M.....Saginaw

Sanilac County

Blanchard, Mrs. Ernest.....Deckerville
Gift, Mrs. Weldon.....Marlette
Hart, Mrs. Robert.....Croswell
Learmont, Mrs. H. H.....Croswell
Landy, Mrs. George.....Sandusky
McCrea, Mrs. John.....Marlette
McGrunegle, Mrs. K. T.....Sandusky
Muir, Mrs. Katherine.....Croswell
Tweedie, Mrs. G. Evans.....Sandusky
Tweedie, Mrs. S. Martin.....Sandusky

St. Clair County

Banting, Mrs. Kenneth.....Port Huron
Beck, Mrs. Frank.....Port Huron
Beer, Mrs. Joseph.....St. Clair
Benjamin, Mrs. Clayton C.....Port Huron
Borden, Mrs. Charles L.....Port Huron
Bottomly, Mrs. Thomas.....Port Huron
Boughner, Mrs. Walter F. .....Algonac
Bovee, Mrs. M. E.....Port Huron
Callery, Mrs. Albert L.....Port Huron
Cleland, Mrs. Wm. D., Jr. ....Port Huron
Clifford, Mrs. R. P.....St. Clair
Clyne, Mrs. B. C.....Yale
Fitzgerald, Mrs. E. W.....Port Huron
Gilmore, Mrs. J. R.....Port Huron
Hazeldine, Mrs. H. J.....Port Huron
Holcomb, Mrs. R. J.....Marine City
Hoyt, Mrs. Charles M.....Port Huron
Kahn, Mrs. Oscar.....Capac
Kimball, Mrs. F. B.....Port Huron
Lauridsan, Mrs. James.....Port Huron
LeGalley, Mrs. Kenneth.....Port Huron
Licker, Mrs. R. R.....Marysville
Ludwig, Mrs. Claude A.....Port Huron
Ludwig, Mrs. Fred E.....Port Huron
McCoy, Mrs. Leslie.....Port Huron
Martin, Mrs. Clyde A.....Port Huron
Meredith, Mrs. Evert W.....Port Huron
Novak, Mrs. Walter.....Port Huron
Patterson, Mrs. Dorsey.....Port Huron
Pollock, Mrs. Donald A.....Port Huron
Ryerson, Mrs. Wm. W.....Port Huron
Sanderson, Mrs. J. L. .....Port Huron
Schaefer, Mrs. Waldo A.....Port Huron
Sites, Mrs. Edgar C.....Port Huron
Thomas, Mrs. Charles F.....Port Huron
Treadgold, Mrs. Douglas.....Port Huron
Wass, Mrs. H. C.....St. Clair
Waters, Mrs. George.....Port Huron
Wetzel, Mrs. John .....St. Clair
Wheeler, Mrs. Margaret.....Port Huron

St. Joseph County

Berg, Mrs. L. A.....Sturgis
Blood, Mrs. J. V.....Three Rivers
Braham, Mrs. W. G.....Sturgis
Brunson, Mrs. A. E.....Sturgis
Emory, Miss Blanche.....Sturgis
Fiegel, Mrs. S. A.....Sturgis
Fortner, Mrs. R. J.....Three Rivers
Gillespie, Mrs. Gerlie.....Sturgis
Kane, Mrs. D. M. .....Sturgis
Lepard, Mrs. Olin.....Sturgis
McGrath, Mrs. Neal .....Three Rivers
Miller, Mrs. C. G.....Sturgis
O'Dell, Mrs. J. H.....Three Rivers
O'Dell, Mrs. Charles.....Three Rivers
Myer, Mrs. Clifton.....Colon
Parrish, Mrs. M. F.....Sturgis
Pennington, Mrs. H. C.....White Pigeon
Penzotti, Mrs. S. C.....Three Rivers

Porter, Mrs. C. G.....Three Rivers
Reed, Mrs. F. R.....Three Rivers
Robinson, Mrs. Fred.....Sturgis
Shaw, Mrs. G. D.....Three Rivers
Sheldon, Mrs. J. P.....Sturgis
Slote, Mrs. L. K.....Constantine
Springer, Mrs. R. A.....Centreville
Tesar, Mrs. F. J.....Centreville
Weir, Mrs. D. C.....Three Rivers
Zimont, Mrs. R. D. .....Constantine

Shiawassee County

Brown, Mrs. Richard .....Owosso
Buzzard, Mrs. W. D. .....Chesaning
Dillon, Mrs. T. J. .....Perry
Elliott, Mrs. Bruce .....Ovid
Greene, Mrs. F. W. .....Owosso
Hoshal, Mrs. Vern .....Durand
Janci, Mrs. Julius .....Owosso
Merz, Mrs. Walter .....Owosso
Mitchell, Mrs. A. B. .....Owosso
Purcell, Mrs. S. L. .....Owosso
Richards, Mrs. Chester .....Durand
Sahlmark, Mrs. Joseph F.....Owosso
Smith, Mrs. Louise .....Ovid
Weinkauf, Mrs. William .....Corunna
Weston, Mrs. Claude .....Owosso

Tuscola County

Ballard, Mrs. James H. .....Cass City
Cook, Mrs. Raymond .....Akron
Pelczar, Mrs. Walter E. .....Unionville
Ruskins, Mrs. D. B. .....Caro
Savage, Mrs. Lloyd L. .....Caro
Starmann, Mrs. Bernard .....Cass City
Swanson, Mrs. E. C. .....Vassar

Washtenaw County

Allen, Mrs. Arthur .....Ann Arbor
Atchison, Mrs. R. M. .....Northville
Badgley, Mrs. Carl .....Ann Arbor
Barr, Mrs. Albert .....Ann Arbor
Bassow, Mrs. Paul .....Ann Arbor
Beebe, Mrs. Hugh .....Ann Arbor
Belote, Mrs. George .....Ann Arbor
Benz, Mrs. Alvin .....Ann Arbor
Campbell, Mrs. Darell .....Ann Arbor
Cawley, Mrs. Edward .....Ann Arbor
Cheney, Mrs. William .....Ann Arbor
Coller, Mrs. Frederick .....Ann Arbor
Crook, Mrs. Clarence .....Ann Arbor
Cummings, Mrs. Howard H. ..Ann Arbor
Curtis, Mrs. Arthur C. .....Ann Arbor
De Jong, Mrs. Russell N. .....Ann Arbor
De Tar, Mrs. John S. .....Milan
Dignman, Mrs. Reed .....Ann Arbor
Dolfin, Mrs. W. E. .....Ann Arbor
Engelke, Mrs. Otto .....Ann Arbor
Falls, Mrs. Harold .....Ann Arbor
Fink, Mrs. George .....Ann Arbor
Fralick, Mrs. Bruce .....Ann Arbor
Frost, Mrs. Lyle .....Ypsilanti
Furstenberg, Mrs. Albert C. ..Ann Arbor
Ganzhorn, Mrs. Edwin .....Ann Arbor
Gates, Mrs. John .....Ann Arbor
Gates, Mrs. Neil .....Ann Arbor
Gotz, Mrs. Alexander .....Ann Arbor
Grawn, Mrs. Frank .....Ypsilanti
Greenway, Mrs. Guerdon .....Ypsilanti
Haas, Mrs. Reynold .....Ann Arbor
Hagerman, Mrs. George .....Ann Arbor
Hannum, Mrs. M. R. .....Milan
Harrelson, Mrs. William D. ....Ann Arbor
Harris, Mrs. Bradley .....Ypsilanti
Harris, Mrs. Scott .....Ypsilanti
Henderson, Mrs. John .....Ann Arbor
Himler, Mrs. Leonard .....Ann Arbor
Hodges, Mrs. F. G. .....Ann Arbor
House, Mrs. Frederick .....Ann Arbor
Howard, Mrs. Stacy .....Ann Arbor
Ideson, Mrs. Robert .....Ann Arbor
Kambley, Mrs. Arnold .....Ann Arbor
Keene, Mrs. Clifford .....Ann Arbor
Kemper, Mrs. John .....Ann Arbor
Kiess, Mrs. Robert .....Ann Arbor
LaFever, Mrs. Sidney L. .....Ann Arbor
Law, Mrs. John .....Ann Arbor
Marshall, Mrs. Mark .....Ann Arbor
Martin, Mrs. D. W. .....Ypsilanti
Maxwell, Mrs. James H. .....Ann Arbor
McCotter, Mrs. Rollo .....Ann Arbor
McEachern, Mrs. Thomas .....Ann Arbor
Milford, Mrs. Albert F. .....Ypsilanti
Moore, Mrs. V. M. .....Ann Arbor
Muehlig, Mrs. George .....Ann Arbor
Myers, Mrs. Dean W. .....Ann Arbor
Newton, Mrs. Charles W. ....Ann Arbor
Patterson, Mrs. Ralph M. .....Ann Arbor
Peet, Mrs. Max M. .....Ann Arbor
Pollard, Mrs. H. Marvin .....Ann Arbor
Ratliff, Mrs. R. K. .....Ann Arbor
Riggs, Mrs. Harold .....Ann Arbor
Ross, Mrs. C. Howard .....Ann Arbor
Sayre, Mrs. George .....Ypsilanti
Schumacher, Mrs. W. E. .....Ann Arbor
Scoville, Mrs. Henry .....Ypsilanti
Seevers, Mrs. M. H. .....Ann Arbor
Seime, Mrs. Reuben .....Ypsilanti
Sheldon, Mrs. John M. .....Ann Arbor
Sink, Mrs. Emory .....Ann Arbor
Slocum, Mrs. George .....Ann Arbor
Spears, Mrs. Clarence .....Ypsilanti
Syewart, Mrs. Wayne .....Ypsilanti
Sturgis, Mrs. Cyrus C. .....Ann Arbor
Teed, Mrs. R. Wallace .....Ann Arbor
Tompsett, Mrs. Arthur C. .....Ann Arbor
Towsley, Mrs. Harry A. .....Ann Arbor
Waggoner, Mrs. Raymond W. ..Ann Arbor
Westcott, Mrs. George W. .....Ypsilanti
Wessinger, Mrs. John .....Ann Arbor
Wetterstroem, Mrs. R. .....Northville
Williams, Mrs. Howard R. ....Ann Arbor
Williamson, Mrs. Frederick .....Ypsilanti
Woods, Mrs. J. J. .....Ypsilanti
Zerbi, Mrs. Victor ....Willow Run Village

Wayne County

Abbott, Mrs. William .....Grosse Pointe
Akroyd, Mrs. C. A. .....Detroit
Albrecht, Mrs. H. F. .....Detroit
Alles, Mrs. R. W. .....Detroit
Amos, Mrs. T. G. .....Detroit
Anderson, Mrs. Bruce .....Pontiac
Arehart, Mrs. B. W. .....Detroit
Ashe, Mrs. S. R. .....Dearborn
Ashley, Mrs. L. B. .....Detroit
Andries, Mrs. George H. .....Detroit
Athay, Mrs. R. M. .....Eloise
August, Mrs. H. E. ....Huntington Woods
Axelson, Mrs. A. U. .....Detroit
Babcock, Mrs. L. K. .....Detroit
Babcock, Mrs. W. W. .....Detroit
Baer, Mrs. George .....Grosse Pointe
Bagley, Mrs. H. E. .....Dearborn
Bailey, Mrs. C. C. .....Detroit
Bailey, Mrs. L. J. .....Detroit
Balcerski, Mrs. Matthew ....Grosse Pointe
Barone, Mrs. Charles J. ..Highland Park
Barrett, Mrs. Wyman D. .....Grosse Pointe Farms
Bartemeier, Mrs. Leo .....Grosse Pointe Farms
Bates, Mrs. W. M. .....Detroit
Baumgarten, Mrs. E. C. ..Groose Pointe
Beach, Mrs. Watson ..Groose Pointe Farms
Beam, Mrs. A. D. .....Grosse Pointe
Beery, Mrs. William J. .....Grosse Pointe
Bell, Mrs. J. K. .....Highland Park
Bentley, Mrs. Neil .....Detroit
Berlien, Mrs. I. C. .....Detroit
Best, Mrs. Edward .....Grosse Pointe
Bicknell, Mrs. E. A. .....Detroit
Bird, Mrs. Waldo .....Berkley
Blain, Mrs. Alexander .....Grosse Pointe
Bookmyer, Mrs. R. H. .....Detroit
Bracken, Mrs. A. H. .....Dearborn
Brines, Mrs. O. A. .....Detroit
Bittrich, Mrs. N. B. .....Detroit
Bringard, Mrs. Elmer .....Detroit
Brooks, Mrs. C. D. .....Detroit
Brown, Mrs. Audrey O. .....Detroit
Brown, Mrs. Gordon T. .....Detroit
Brown, Mrs. Henry S. .....Detroit
Buesser, Mrs. Frederick .....Detroit
Burgess, Mrs. C. M. .....Pleasant Ridge
Burke, Mrs. R. M. .....Grosse Pointe
Calahan, Mrs. J. L. .....Wyandotte
Calkins, Mrs. H. N. .....Detroit
Callaghan, Mrs. T. T. .....Detroit
Campan, Mrs. George .....Detroit
Campbell, Mrs. Mac D. ....Pleasant Ridge
Candler, Mrs. C. L. .....Detroit
Carpenter, Mrs. Claire H. ..Highland Park
Carter, Mrs. J. M. .....Detroit
Carter, Mrs. Leland F. .....Grosse Pointe
Cavell, Mrs. R. W. .....Dearborn
Chall, Mrs. Henry G. .....Detroit
Chance, Mrs. Joseph H. .....Detroit
Chipman, Mrs. W. A. .....Detroit
Christensen, Mrs. C. A. .....Dearborn
Christopher, Mrs. Jas. G. .....Detroit
Clark, Mrs. H. E. .....Detroit
Clifford, Mrs. T. P. .....Detroit
Clinton, Mrs. Wm. R. .....Detroit
Coates, Mrs. C. A. .....Dearborn
Cohoe, Mrs. D. A. .....Detroit
Cole, Mrs. J. E. .....Detroit
Connelly, Mrs. R. C. .....Grosse Pointe
Connors, Mrs. John J. .....Detroit
Cook, Mrs. Jas. C. .....Dearborn
Cooksey, Mrs. Warren B. .....Detroit
Cooper, Mrs. B. F. .....Detroit
Cooper, Mrs. E. L. .....Detroit
Corbett, Mrs. John J. .....Grosse Pointe
Costello, Mrs. R. T. .....Pontiac
Darling, Mrs. M. A. .....Detroit
Davies, Mrs. Windsor .....Grosse Pointe
Dawson, Mrs. W. A. .....Inkster
Delaney, Mrs. Jos. H. ....North Carolina
Dempster, Mrs. J. H. .....Detroit
DeNike, Mrs. A. J. .....Detroit
Dennis, Mrs. M. S. .....Detroit
Dittmer, Mrs. E. F. .....Detroit
Donald, Mrs. Douglas .....Detroit
Doub, Mrs. H. P. .....Detroit
Dowdle, Mrs. Edward .....Detroit
Downer, Mrs. Ida G. .....Detroit
DuBois, Mrs. P. W. .....Detroit
Dudek, Mrs. John J. .....Wyandotte
Dunlap, Mrs. Henry .....Grosse Pointe
Dunn, Mrs. C. E. .....Detroit
Dwyer, F. W. .....Detroit
Edgar, Mrs. R. G. .....Dearborn
Edmondson, Mrs. R. B. .....Detroit
Eldredge, Mrs. E. F. .....Detroit
Eisman, Mrs. C. H. .....Detroit
Elvidge, Mrs. R. J. .....Detroit
Evand, Mrs. Wm. A. .....Detroit
Ewing, Mrs. C. H. .....Grosse Pointe
Faunce, Mrs. S. P. .....Detroit
Felcyn, Mrs. W. G. .....Detroit
Fellers, Mrs. R. L. .....Detroit
Fenner, Mrs. Wm. G. .....Detroit
Fenton, Mrs. R. F. .....Detroit
Fenton, Mrs. Stanley C. .....Detroit
Fisher, Mrs. C. L. .....Grosse Pointe
Fisher, Mrs. G. S. .....Detroit
Fitzgerald, Mrs. J. M. .....Detroit
Flaherty, Mrs. N. W. .....Dearborn
Flaherty, Mrs. Samuel A. .....Detroit
Foote, Mrs. James A. .....Lincoln Park
Ford, Mrs. G. A. .....Detroit
Foster, Mrs. Wm. L. .....Detroit
Fraser, Mrs. E. E. .....Detroit
Freeman, Mrs. M. W. .....Detroit
Fryfogle, Mrs. Jas. D. .....Detroit
Gardner, Mrs. L. W. .....Detroit
Gariepy, Mrs. L. J. .....Detroit
Gaston, Mrs. H. B. .....Dearborn
Gehring, Mrs. H. W. .....Birmingham
Geib, Mrs. L. O. .....Grosse Pointe
Gellert, Mrs. I. S. .....Detroit
Gerondale, Mrs. E. J. .....Detroit
Gitlin, Mrs. C. .....Detroit
Gittins, Mrs. Perry .....Detroit
Glowacki, Mrs. B. F. .....Detroit
Gordon, Mrs. J. W. .....Detroit
Gottschalk, Mrs. F. W. .....Detroit
Goux, Mrs. R. S. .....Detroit
Grace, Mrs. Jos. M. .....Detroit
Gravelle, Mrs. L. J. .....Grosse Pointe
Greenlee, Mrs. W. T. .....Detroit
Grossman, Mrs. Sol C. .....Detroit
Guerrero, Mrs. E. S. .....Detroit
Gurdjian, Mrs. E. S. .....Detroit
Hall, Mrs. E. W. .....Detroit
H'Amada, Mrs. N. K. .....Detroit
Hansen, Mrs. F. E. .....Detroit
Hardy, Mrs. Geo. C. .....Detroit
Harm, Mrs. W. B. .....Detroit
Harper, Mrs. J. T. .....Detroit

Harris, Mrs. Harold H. .....Dearborn
Hartman, Mrs. F. W. .....Detroit
Hauser, Mrs. John E. .....Detroit
Hauser, Mrs. I. Jerome .....Detroit
Havers, Mrs. Howard .....Grosse Pointe
Hawkins, Mrs. Jas. W. .....Detroit
Heldt, Mrs. T. G. .....Pleasant Ridge
Henderson, Mrs. L. T. .....Grosse Pointe
Heyner, Mrs. S. A. .....Detroit
Hickey, Mrs. Jos. .....Dearborn
Hillenbrand, Mrs. A. E. ....Grosse Pointe
Hodoski, Mrs. F. J. .....Dearborn
Hoffman, Mrs. E. S. .....Detroit
Honhart, Mrs. F. L. .....Grosse Pointe
Hookey, Mrs. John A. .....Wyandotte
Hoops, Mrs. G. B. .....Detroit
Horton, Mrs. R. H. .....Detroit
Howard, Mrs. A. Z. .....Detroit
Howlett, Mrs. Howard T. .....Detroit
H'Romadke, Mrs. Louis .....Detroit
Hull, Mrs. L. W. .....Detroit
Huminski, Mrs. T. S. .....Detroit
Hunt, Mrs. Theodore H. .....Detroit
Husband, Mrs. Chas. W. .....Detroit
Igna, Mrs. E. J. .....Detroit
Insley, Mrs. Stanley W. .....Detroit
Irwin, Mrs. Wm. A. .....Detroit
Jaekel, Mrs. C. N. .....Grosse Pointe
Jaffer, Mrs. Donald J. .....Detroit
Jarvis, Mrs. H. F. .....Detroit
Johnson, Mrs. R. A. .....Detroit
Johnson, Mrs. Vernon P. ....Grosse Pointe
Johnson, Mrs. Vincent .....Detroit
Johnston, Mrs. Wm. E. .....Detroit
Joinville, Mrs. E. V. .....Windsor, Ont., Canada
Jones, Mrs. Roy D. .....Detroit
Jordan, Mrs. R. G. .....Detroit
Joyce, Mrs. Stanley J. .....Detroit
Kasper, Mrs. Jos. A. .....Detroit
Kaump, Mrs. D. H. .....Detroit
Keane, Mrs. Wm. E. .....Grosse Pointe
Kehoe, Mrs. Henry J. .....Detroit
Keim, Mrs. Harther L. ....Grosse Pointe
Kelley, Mrs. Frank J. .....Grosse Pointe
Kennary, Mrs. James .....Detroit
Kidner, Mrs. F. C. .....Grosse Pointe
King, Mrs. Edward D. .....Detroit
King, Mrs. Melbourne .....Detroit
Kline, Mrs. Starr L. .....Detroit
Knaggs, Mrs. Chas. W. ....Grosse Pointe
Knox, Mrs. Ross M. .....Allen Park
Koebel, Mrs. R. H. .....Grosse Pointe
Kokowicz, Mrs. R. J. .....Detroit
Krynicki, Mrs. F. X. .....Detroit
Kullman, Mrs. H. J. .....Dearborn
Kubanek, Mrs. Jos. L. .....Dearborn
Kwasiborski, Mrs. Stanley .....Wyandotte
LaBerge, Mrs. Jas. M. .....Wyandotte
LaMarche, Mrs. Norman O. .....Detroit
Lampman, Mrs. H. H. ....Highland Park
Lange, Mrs. Anthony H. .....Detroit
Laning, Mrs. Geo. M. .....Detroit
Leibinger, Mrs. Henry R. .....Detroit
Lepley, Mrs. Fred O. .....Grosse Pointe
Leszynski, Mrs. J. S. .....Detroit
Liddicoat, Mrs. A. G. .....Detroit
Lightbody, Mrs. J. J. .....Detroit
Lilly, Mrs. Charles J. .....Detroit
Lippoid, Mrs. Paul H. .....Detroit
Lockwood, Mrs. Bruce .....Detroit
Lofstrom, Mrs. James E. ....Grosse Pointe
Loranger, Mrs. Clifford B. ..Grosse Pointe
Lutz, Mrs. Karl F. .....Detroit
MacGregor, Mrs. W. W. .....Detroit
Mackersie, Mrs. Wm. G. .....Detroit
MacMullen, Mrs. Frank B. .....Holly
MacQueen, Mrs. Malcolm D. .....Detroit
Maczewski, Mrs. John .....Detroit
Maibauer, Mrs. Frederick P. ....Wyandotte
Maloney, Mrs. John .....Birmingham
Mancuso, Mrs. Vincent S. .....Detroit
Marsh, Mrs. A. R. .....Dearborn
Martin, Mrs. E. G. .....Detroit
Martmer, Mrs. Edger E. ....Grosse Pointe
May, Frederick T., Jr. .....Detroit
Mayer, Mrs. E. V. .....Detroit
Mayer, Mrs. Ignatz .....South Bend, Ind.
McAlonan, Mrs. Wm. T. .....Detroit
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McClelland, Mrs. Carl C. .....Detroit
McColl, Mrs. Clark .....Detroit
McCormick, Mrs. Colin C. .....Dearborn
McCormick, Mrs. Frank T. .....Detroit
McDonald, Mrs. A. L. .....Grosse Pointe
McDonald, Mrs. Allan .....Detroit
McGraw, Mrs. Arthur B. ....Grosse Pointe
McKinnon, Mrs. John D. .....Detroit
Menagh, Mrs. Frank R. .....Detroit
Merrill, Mrs. Wm. O. ....Bloomfield Hills
Miller, Mrs. Thomas H. .....Detroit
Minor, Mrs. Edward G. .....Detroit
Mitchell, Mrs. W. Bede .....Detroit
Molnar, Mrs. Stephen K. .....Detroit
Molner, Mrs. J. G. .....Detroit
Monson, Mrs. Robert C. .....Detroit
Murray, Mrs. Wm. A. .....Detroit
Nagle, Mrs. John W. .....Grosse Ile
Nahigian, Mrs. Russell .....Detroit
Newbarr, Mrs. A. A. .....Detroit
Normile, Mrs. Thomas W. ..Grosse Pointe
Norton, Mrs. A. B. .....Detroit
Novy, Mrs. Robert L. .....Detroit
Ohmart, Mrs. Galen B. .....Detroit
Olmstead, Mrs. Wm. R. .....Detroit
Owen, Mrs. Clarence I. .....Detroit
Parr, Mrs. Robert W. .....Detroit
Parsons, Mrs. John P. .....Grosse Pointe
Perkins, Mrs. Frank .....Grosse Pointe
Pickard, Mrs. O. W. .....Detroit
Pichette, Mrs. J. W. .....Dearborn
Pietraszewski, Mrs. Alex W. .....Detroit
Pino, Mrs. R. H. .....Detroit
Plaggemeyer, Mrs. H. W. .....Detroit
Porretta, Mrs. F. S. .....Detroit
Potter, Mrs. L. S. .....Grosse Pointe
Priborsky, Mrs. Ben. H. .....Detroit
Procailo, Mrs. A. B. .....Wayne
Purcell, Mrs. Frank H. .....Grosse Pointe
Reed, Mrs. H. Walter .....Detroit
Rennell, Mrs. Leo .....Detroit
Reveno, Mrs. Wm. S. .....Highland Park
Reyner, Clarence E. .....Detroit
Reynolds, Mrs. R. P. .....Detroit
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Rothbart, Mrs. H. B. .....Detroit
Runge, Mrs. E. F. .....Dearborn
Rupp, Mrs. Jacob R. .....Detroit
Ryan, Mrs. W. D. .....Detroit
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Sharp, Mrs. Elwood A. .....Grosse Pointe
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Schmidt, Mrs. N. R. .....Trenton
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Schulte, Mrs. Carl H. .....Detroit
Seeley, Mrs. J. B. .....Dearborn
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White, Mrs. Milo R. .....Detroit
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Williams, Mrs. C. J. .....Grosse Pointe
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Wood, Mrs. Kenneth A. .....Detroit
Yott, Mrs. Wm. J. .....Detroit
Young, Mrs. Lloyde .....Detroit
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Masselink, Mrs. N. J. .....McBain
Merritt, Mrs. C. E. .....Manton
Moore, Mrs. Gregory P. .....Cadillac
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Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

To protect the health of Michigan's 7,000,000 summer vacation visitors, the Michigan Department of Health and the local health departments of the state have stepped up their resort sanitation and health protection activities.

In areas where there are local health departments, the sanitarians who carry on year-around programs related to restaurant, water and milk sanitation and sewage disposal in their communities, are now expanding these activities to include the resorts in the area. Some local health departments will employ additional sanitarians for the purpose.

The Michigan Department of Health has added five resort sanitarians who will work with local health departments and resort owners and will inspect resorts in areas where there are no local health departments. Four of the men are summer employes, but the fifth will be on a year around basis to continue the service to resort operators during the less busy times of year.

Sanitarians throughout the state are now making inspections of water supply, food handling, sewage disposal, bathing facilities and general safety of the state's 3,500-odd resorts and camps. Those complying with sanitation and safety standards are given metal "Sanitation Approved" signs which they may display.

Water supply and bathing beach samples are continually being checked in the Michigan Department of Health laboratories in Lansing, Grand Rapids, Houghton and Powers as well as the new trailer laboratory in Gaylord to keep current check on undue contamination.

The year around inspection of water and food supplies of common carriers—that is, boats, planes and trains—is now expanded to include water and food on the state's ferries and excursion boats and summer resort specials.

The local and state health departments are increasing their communicable disease control activities, and their reporting service keeps all sections of the state informed of any outbreak of communicable diseases anywhere in the state.

Snake anti-venum serum is available in the main or branch laboratories of the Michigan Department of Health. Tetanus toxoid and antitoxin, made in the laboratories of the Department, are available from the laboratories or from the local health departments. Consultants from the Michigan Department of Health are available at all times to assist in combating emergency outbreaks of illness or epidemics or in any emergency sanitation problems.

Reports of the 1949 ragweed pollen survey made by the Michigan Department of Health to help sufferers find haven in the state can be obtained from the Department. A pamphlet, "Michigan Wishes You Well" which gives advice to vacationists on the protection of their health may also be obtained from the local health departments or the Michigan Department of Health, Lansing 4, Michigan.

* * *

Michigan residents may have free chest x-rays at thirty-one fairs in the state this summer, and find out whether they have healthy chests.

Five mobile chest x-ray units of the Michigan Department of Health will visit fairs during August and September as a part of the state-wide tuberculosis casefinding program. All persons over 14 years of age may have x-rays of their chests made without charge.

More than 2,000 suspect cases of tuberculosis have been found among the 138,000 persons x-rayed by the units at fairs in the past three years. Last year five units visiting thirty-two fairs x-rayed 51,724 persons and found 485 cases of suspect tuberculosis.

When the x-ray shows an abnormal chest condition, the individual is advised to see his physician. His physician is also notified so that arrangements can be made for additional x-rays and complete diagnosis of the abnormal condition. If the x-ray reveals a normal chest, the individual is notified that his chest is normal.

* * *

The health services of the Grosse Pointe Health Department which was discontinued April 1, 1950, were taken over by the Wayne County Health Department, David Littlejohn, M.D., Director. All mail formerly addressed to the Grosse Pointe Health Department goes to the Wayne County Health Department.

* * *

So great was the demand for training of local technicians to do vision screening that two training institutes were added to the one originally planned. The institutes to train technicians recommended by local schools and health departments were conducted by Caroline Austin, Vision Consultant of the Michigan Department of Health. They were scheduled as follows: Michigan State Normal College, June 26 to 30 and July 10 to 14 and Northern Michigan College of Education, July 17 to 21.

* * *

Among the 150,000 Michigan children tested for hearing loss under the statewide Hearing Conservation Program last year, about three per cent of those tested had some degree of hearing loss.

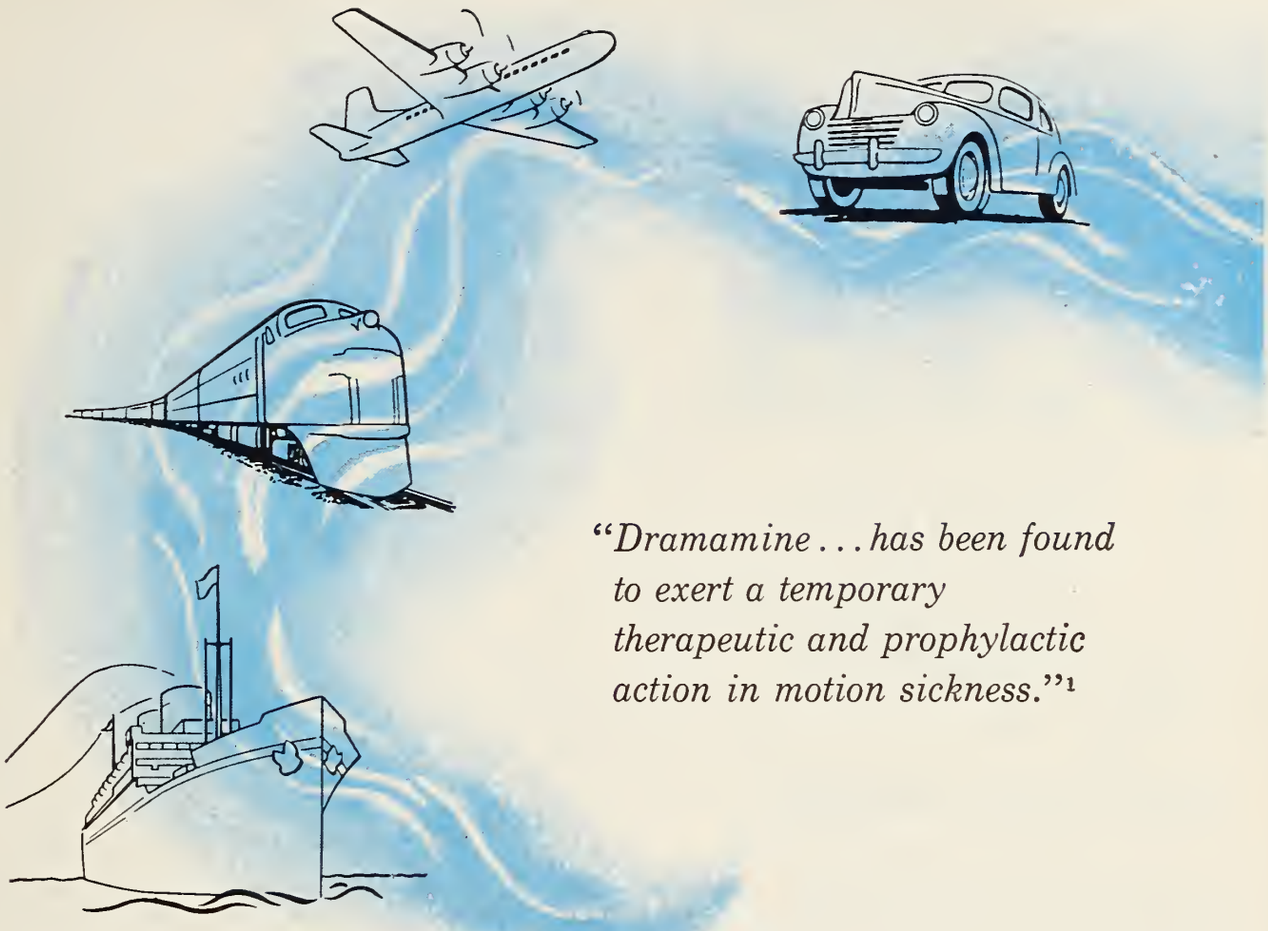
Recent studies indicate that there are 40,000 Michigan children who have some hearing loss, 15,000 of them with so much loss that they cannot hear the ordinary sounds or hear all that their teachers are saying.

Approximately 75 per cent of the children found to have hearing loss, and adequately treated, returned to normal hearing and to a definitely better social and educational adjustment.

* * *

The Michigan Department of Health will take venereal disease facts to the midways of eight Michigan

(Continued on Page 856)



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1. Council on Pharmacy & Chemistry: New and Non-official Remedies, 1950, Philadelphia, J. B. Lippincott Co., 1950, p. 460.

*Trademark of G. D. Searle & Co., Chicago 80, Ill.

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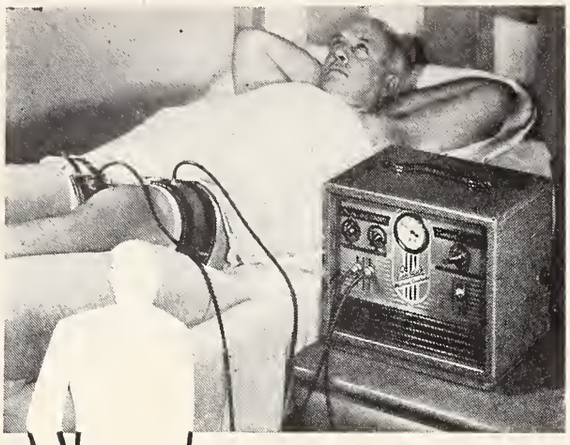

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(Continued from Page 854)

fairs this summer in an educational walk-through tent show tentatively called "Since Adam and Eve."

The show which will include animated dioramas, photographs, posters and pamphlets will give plain facts for lay people. It is a departure from the motion picture type of show presented by the Division of Venereal Disease Control at fairs during the past two years, and is expected to get greater visitation because their will be no waiting, seeing the show will require less time than viewing a movie and more people will be able to see the show in a limited period of time.

The show will go on the road August 1 when it will make its initial appearance at the Barry County Fair in Hastings. It is also to appear at the Michigan State Fair in Detroit and the Upper Peninsula Fair in Escanaba, among others, during the summer. When the fair circuit has been covered, the exhibit will be available for use elsewhere in convention halls, indoor fairs and expositions throughout the state.

* * *

If you don't like to *drink* milk, then you should *eat* it, the Michigan Department of Health advised people during June—National Dairy Month. The Department advised housewives to acquaint themselves with more recipes using fluid milk, dry skim milk, condensed or evaporated milk, cheese and cottage cheese to make sure that every member of the family gets sufficient milk in his diet. The Department also emphasized the importance of adequate milk in the diets of people past middle age.

* * *

A compulsory rest period every afternoon for every child, and definitely limited swimming periods are being recommended this summer by the Michigan Department of Health as additional protection against poliomyelitis. These recommendations are being made on the basis of accumulated evidence that allowing a child to become over-tired or chilled has marked bearing on the amount of paralysis resulting from poliomyelitis.

* * *

Infant diarrhea and the responsibilities for the control of infection in the nursery were among the subjects considered in four two-day institutes conducted throughout the state during June by the Michigan Hospital Association with the assistance of the Michigan Department of Health.

Planned especially for hospital administrators, physicians, directors of nursing and nursing education, maternity and nursing supervisors, staff nurses, hospital trustees and members of hospital auxiliaries, the institutes were also open to public health people.

Among subjects discussed were: co-ordination of hospital and public health services, parent education development in the community, modern maternity nursing care and human relations and hospital job instructor training. Dr. Albert E. Heustis and Dr. G. D. Cummings of the Michigan Department of Health were among the speakers at each institute.

* * *

The use of iodized salt for all eating and cooking purposes "to prevent simple goiter, to improve nutrition,

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physical health and mental alertness" is being urged by the Michigan Department of Health. Iodized salt has been available in Michigan for the past twenty-six years. The Department continually reminds housewives to insist on iodized salt.

* * *

Four teams of national dental authorities are bringing latest dental techniques and information to all Michigan dentists in their home communities this spring and fall.

Sponsored by the Michigan State Dental Society and the Michigan Department of Health, district dental institutes were arranged to give latest knowledge in dental practice to the dentists without removing them from their practice.

Meetings for dentists from the upper peninsula and five lower Michigan districts were held in June. Meetings for the other half of the state will be held either in September or October. Among subjects being considered is oral cancer.

* * *

As the result of the deaths of fifteen small children and more than 4,000 new cases of whooping cough in the state in the first five months of this year, the Michigan Department of Health reiterated its warning that Michigan children must be immunized against the disease beginning by the time they are six months of age, and that they must have booster shots by age three and at age five before they enter school. In addition the Department has warned parents to keep the well baby away from other people when there is whooping cough in the community—this includes older brothers and sisters, aunts, uncles and grandparents as well as neighbors—and not to take the baby shopping or into a crowd.

Any Michigan municipality planning any alteration or addition to a public water supply or sewage system must obtain a construction permit from the Michigan Department of Health.

In the case of major improvements of construction, a permit usually is obtained by the municipality. But even so-called minor alterations or alterations such as a short length of new water main or sewer, replacing existing water mains or sewers with larger sizes, installing a new turbine pump on a well, redeveloping a well and installing a new screen, installing a new high service pump at a treatment plant, installing a sewage lift or pumping station or storm water diversion structure, require a construction permit from the department.

The statute requiring the permits provides that unless a construction permit is obtained, it is illegal for the municipality to spend any money for the improvement. This section of the act was only recently upheld in Oakland County Circuit Court. Thus it behooves not only the municipality to obtain a permit, but also the contractor to protect himself by determining whether a construction permit has been obtained before he starts work.

Another statute requires that, where proposed improvements cost $2,000 or more, plans must be prepared by a professional engineer registered with the State Board of Registration for Architects, Professional Engineers, and Land Surveyors.

* * *

Here are some tips on baby sitters recently issued by the Michigan Department of Health:

1. Know your baby sitter and her family background well enough so you feel sure the sitter is mentally and

Say you saw it in the Journal of the Michigan State Medical Society

Your Patients will be Well Cared for at Battle Creek Sanitarium

From the moment of their admission to the moment of their discharge, your patients will receive the finest of care here at Battle Creek. Modern diagnostic and therapeutic facilities, a highly trained medical and surgical staff, and skilled nurses and technicians give assurance of outstanding therapy and handling.

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physically healthy; know that she is old enough to be responsible and that she knows her first responsibility as a sitter is the safety of the child. If you are going to be out late, employ an older sitter.

2. Write, near the telephone, the number of the fire department and the police department and the number where you can be reached at any time. If you are moving about, call to leave the number where you will be.

3. Tell a responsible neighbor that you are going out and a baby sitter will be on duty, and tell the baby sitter that this neighbor will help her in case of emergency.

4. Point out to the sitter the danger points in your home, the places where your child might get hurt.

5. Be sure that your child understands that he must obey the sitter. Tell the sitter when the child should go to bed, whether to read to him, whether to bathe him, whether to feed him, and that she should check on him occasionally to see that he is covered and sleeping properly.

6. Leave a lunch for the sitter if you are to be gone a long time, allow her to play the radio quietly, but it is best not to permit her to have guests or to use the telephone except for necessary calls. Advise her not to let strangers enter the house.

7. Provide proper and safe transportation for the sitter to and from your home.

Michigan's best current thinking on important policies and procedures in hospital maternity departments is contained in a new publication "Recommendations for Hospital Maternity Departments" which has just been published by the Michigan Department of Health.

Collaborators with the Department in the preparation of the bulletin were the Maternal Health Committee, the Child Welfare Committee, and the Advisory Committee to the Section of Maternal and Child Health, all of the Michigan State Medical Society; the University of Michigan; Wayne University; Michigan Department of Social Welfare; Detroit City Health Department, and hospital administrators and others throughout the state.

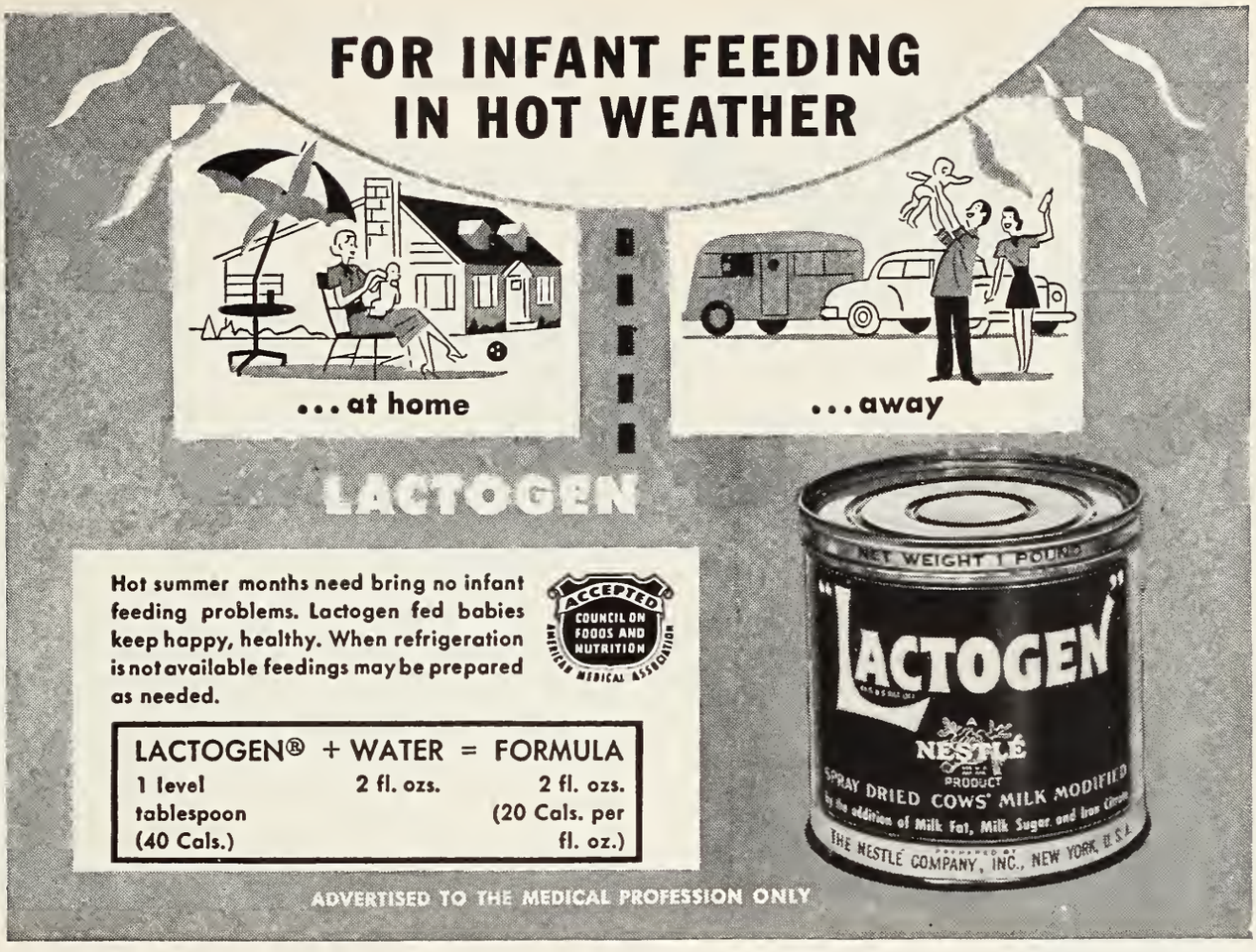
Copies of the publication may be obtained by writing to the Section of Maternal and Child Health, Division of Local Health Administration, Michigan Department of Health.

* * *

A revised list of tuberculosis hospitals and sanatoria approved by the State Health Commissioner for receipt of state subsidy has been prepared. Copies are available from the Division of Tuberculosis and Venereal Disease Control.

* * *

To better qualify waterworks men to protect and operate municipal supplies and to prepare them for certification examinations and more advanced positions, the Division of Engineering conducted a two-day institute for Upper Peninsula Water Works Men in Iron Mountain early in May. The attendance at this second annual institute was double that of the first and included fifty-seven persons—consulting engineers, city officials and township supervisors, as well as water treatment plant men.



The Department also has arranged other in-service training courses which are being held throughout the state with about 150 water treatment plant men attending.

* * *

Inspection of summer resort sanitation to protect the health of seven million vacationists, as well as six and one-third million permanent residents, is placing severe strain on sanitation personnel of the state and local health departments, this summer.

There are 3,600 resorts, providing sleeping accommodations for 74,000 persons a night, which must be inspected. The number of resorts has increased by one-third in the past five years. (These resorts do not include hotels, cottages or cabins rented to families by the month or week.) A single resort inspection includes such complex matters as water and sewage disposal, garbage and refuse disposal, food handling facilities, bathing beach facilities, and general cleanliness and maintenance. The complexity is multiplied in the case of cabin camps which comprise 72 per cent of these resorts. Approximately 1,500 of these resorts are in areas where there are no local health departments or areas where the resort load is too heavy for the local sanitarians to handle.

* * *

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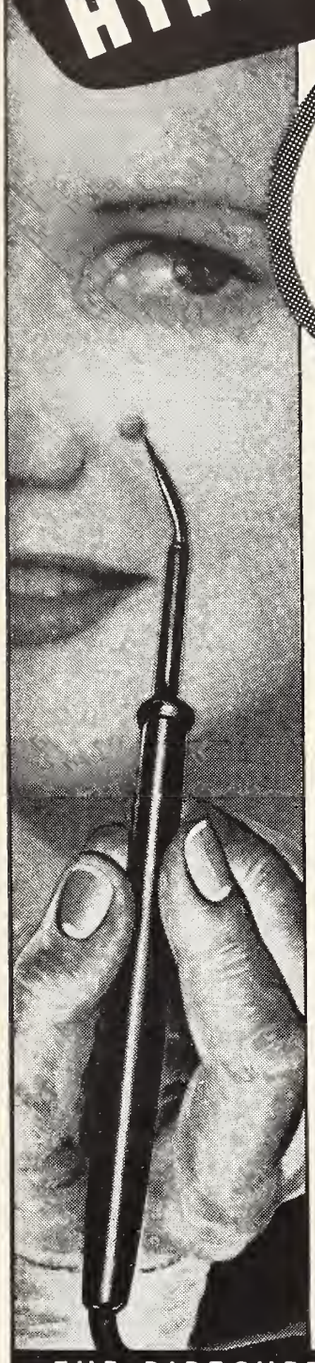

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IN MEMORIAM

Joseph H. Andries, M.D., of Detroit was born April 7, 1874, in Milwaukee, Wisconsin. He was graduated from the Friedrich Wilhelm University in Berlin in 1897 and took postgraduate work in Vienna and Rome. Doctor Andries was a past president of the Detroit Academy of Surgery and attending surgeon at St. Joseph's Hospital. He was an honorary member of the Wayne County Medical Society, an emeritus member of the Michigan State Medical Society, a fellow of the American Medical Association and a fellow of the American College of Surgeons. In 1933, Dr. Andries was nominated to the Detroit Medical Hall of Fame. Doctor Andries died April 15, 1950, in Detroit at the age of seventy-six.

* * *

Aaron B. Armsbury, M.D., of Marine City, Michigan, was born in Troy, New York, September 10, 1870, and was graduated from the Cleveland Medical College in 1897. Doctor Armsbury was a past president of the St. Clair County Medical Society, a life member of the Michigan State Medical Society and a member of the American Medical Association. He had practiced in Marine City fifty-two years and served on the Board of Education for thirty-five years. Doctor Armsbury was seventy-nine years of age at the time of his death, April 28, 1950.

* * *

Floyd Wayne Clements, M.D., Interlochen, Michigan, was born December 5, 1876 at Lainsburg, Michigan, and was graduated from the Wayne University College of Medicine in 1905. He served in the Mexican Border campaign and as a Captain in the Army Medical Corps during World War I. He was a former member of the Grand Traverse-Leelanau-Benzie County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor Clements died December 15, 1949, at Interlochen, Michigan, at the age of seventy-four years.

* * *

Ralph W. Dawson, M.D., of Detroit was born January 31, 1879 in Beaver, Pennsylvania, and was graduated from Ohio State University in 1905. He was a member of the Wayne County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor Dawson was on the staff at Mt. Carmel Hospital in Detroit. He died February 28, 1950, in Detroit at the age of seventy-two.

* * *

John W. Evers, M.D., of Flint, Michigan, was born in Bowling Green, Ohio, November 26, 1877, and was graduated from Rush Medical College in 1902. He served as a medical officer with the 90th Division during World War I, was a member of the Genesee County Medical Society, a life member of the Michigan State Medical Society, and a member of the American Medical Association. Doctor Evers had practiced medicine in Flint for forty-three years and was seventy-two at the time of his death, February 11, 1950.

Say you saw it in the Journal of the Michigan State Medical Society

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Earle B. Guile, M.D., of Flint, Michigan, was born March 17, 1871, in Watertown, New York, and was graduated from the Cleveland University of Medicine and Surgery in 1895. He was a member of the Genesee County Medical Society, a life member of the Michigan State Medical Society, a member of the American Medical Association and a life member of the National Homeopathic Society. Doctor Guile died March 24, 1950, in Flint at the age of seventy-nine.

* * *

Roy C. Lintner, M.D., of Ludington, Michigan, was born December 4, 1893, in Mendona, Illinois, and was graduated from the Rush Medical College in 1924. He served in an ambulance corps during World War I, was a member of the Mason County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor Lintner was fifty-six at the time of his death March 12, 1950.

* * *

William J. Presley, M.D., of Grand Haven, Michigan, was born October 20, 1868, in Montgomery County, New York, and was graduated from the Grand Rapids Medical College in 1901. He was a member of the Ottawa County Medical Society, a life member of the Michigan State Medical Society and a member of the American Medical Association. He had practiced in Grand Haven since 1909 and died April 2, 1950, at the age of eighty-two.

* * *

Herman Louis Sarvela, M.D., of Hancock, Michigan, was born August 31, 1883, in Jurra, Finland, and was graduated from the University of Illinois College of Medicine in 1912. At the time of his death on February 14, 1950, he was President of the Houghton-Baraga-Keeweenaw County Medical Society, a member of the Michigan State Medical Society and of the American Medical Association. He was on the staff at St. Joseph's Hospital. He died in Duluth, Minnesota, at the age of sixty-seven.

* * *

George W. Schelm, M.D., of Battle Creek, Michigan, was born November 6, 1890 in Charter Oak, Iowa, and was graduated from the University of Illinois College of Medicine in 1918. He was a member of the Calhoun County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor Schelm was a founder of the College of American Pathologists and a diplomate of the American Board of Pathologists. He died March 11, 1950, in Battle Creek at the age of fifty-nine years.

* * *

Robert Redvers Scott, M.D., of Scottville, Michigan, was born in 1900 and was graduated from the University of Michigan Medical School in 1924. He served as a Captain in the Medical Corps during World War II, was a member of the Mason County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor Scott died in Scottville on January 12, 1950, at the age of forty-nine.

* * *

Royston Earl Scrafford, M.D., of Bay City, Michigan, was born February 11, 1882, in Midland, Michigan, and

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HAZARDS GREATLY REDUCED Transmission of viral hepatitis through plasma transfusion. Ultra-violet radiation permits the omission of a preservative.

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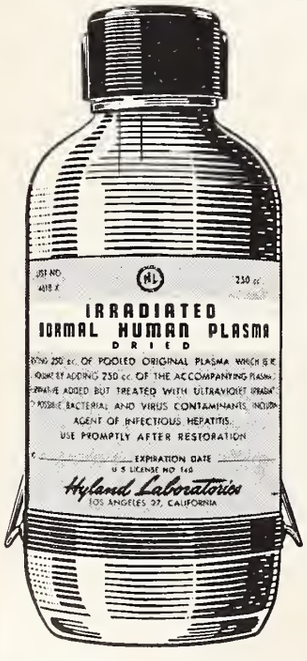

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was graduated from the University of Michigan Medical School in 1906. He served as a Captain in the Army Medical Corps during World War I, was a past president of the Bay County Medical Society, a retired member of the Michigan State Medical Society, and a member of the American Medical Association and the Radiological Society of North America. He was also a fellow of the American College of Surgeons. Doctor Scrafford died February 22, 1950, at the age of sixty-eight.

* * *

Percy H. Willson, M.D., of Chassell, Michigan, was born October 21, 1876, in Listowell, Ontario, Canada, and was graduated from the Wayne University College of Medicine in 1900. He was a member of the Houghton-Baraga-Keeweenaw County Medical Society, the Michigan State Medical Society, the American Medical Association. After practicing in Chassell for forty years, Doctor Willson retired from practice in 1943. He was seventy-three at the time of his death, March 7, 1950.

Communications

COMPARATIVE SHOPPING BEST CURB FOR CONTINUED PRICE PADDING OF GLASSES

To the Editor:

Another Bureau comparative price check-up just completed again discloses a wide range in prices asked for identical eyeglasses in Detroit. It is interesting to note, however, that there has been a further downward trend in prices since the survey about a year ago. At that time substantial reductions were found, following exposure of the "kickbacks" paid by certain optical supply houses to many eye doctors and the Wayne County Medical Society's condemnation of the acceptance of such "kickbacks" by members of the medical profession.

Quotations received in the current check-up on duplicating a pair of single vision plastic frame glasses ranged from $10.00 to $20.50 and on similar quality frames with bifocal lenses from $14.75 to $28.00 . . . stressing the value of comparative shopping before buying glasses.

In an apparent effort to retain merchandising profits previously realized through "kickbacks," some doctors have recently changed their methods of operation. They now have the patient *pay for his glasses at the doctor's office*—instead of the optical supply house as was heretofore the custom. This switch facilitates the continuance of price padding and if you find that your doctor has made such a change, by all means *shop* for your glasses just as you would for any other merchandise which sells at widely varying prices! Don't accept a "lump sum" quotation, but ask for a breakdown giving you the separate cost of your examination, any fitting or service fee, and the price of the *glasses themselves.* Having paid for your examination, the prescription is yours and you are free to take it where you choose and where you find you can buy the glasses you want to the best advantage. SHOP and SAVE!

Say you saw it in the Journal of the Michigan State Medical Society

Optical Dispensing Agreement

As another step in this constructive program the Bureau on May 9 asked the co-operation of Detroit optical goods dispensers in signing the following:

"Being conscious of our responsibility for the health and welfare of the users of optical aids and to the members of the medical profession whose prescriptions we fill, and as members of the business community, we the undersigned adopt the following fair practice rules and agree to abide by the terms thereof in our relations with the public and with the members of the medical profession engaged in refracting the human eye and prescribing therefor.

"We further agree to co-operate with the Better Business Bureau in effectuating these rules of practice, thereby maintaining justified public confidence in optical goods and services.

"I. We agree that we will neither offer nor give to prescribing oculists rebates, credits, gratuities, payments of money, materials or any special consideration whatsoever in connection with the sale of glasses.

"II. In each transaction where we have direct dealings with the consumer, a receipt will be furnished said consumer specifying the services and items sold, with prices of each. A duplicate receipt shall be retained in our files, available to the Bureau upon request."

Half a dozen signed agreements have already been received, and it is anticipated that others will quickly follow . . . and that through the co-operation of these opticians and the prospective purchasers of eyeglasses themselves evasions of anti-rebate rules can be successfully curbed.

Better Business Bureau of Detroit.

May 25, 1950.

Cook County Graduate School of Medicine

ANNOUNCES CONTINUOUS COURSES

SURGERY—Intensive Course in Surgical Technic, two weeks, starting July 24, August 21, September 25.
Surgical technic, Surgical Anatomy and Clinical Surgery, four weeks, starting July 10, August 7, September 11.
Personal Course in General Surgery, two weeks, starting September 25.
Surgery of Colon and Rectum, one week, starting September 11.
Esophageal Surgery, one week, starting October 16.
Breast and Thyroid Surgery, one week, starting October 2.
Thoracic Surgery, one week, starting October 9.
Gallbladder Surgery, ten hours, starting October 23.
Fractures and Traumatic Surgery, two weeks, starting October 9.
Basic Principles in General Surgery, two weeks, starting September 11.
GYNECOLOGY—Intensive Course, two weeks, starting September 25.
Vaginal Approach to Pelvic Surgery, one week, starting September 18.
OBSTETRICS—Intensive Course, two weeks, starting September 11.
MEDICINE—Intensive General Course, two weeks, starting October 2.
Gastro-enterology, two weeks, starting October 16.
Gastroscopy, two weeks, starting July 17, September 25.
DERMATOLOGY—Formal Course, two weeks, starting October 16.
Informal Clinical Course every two weeks.
UROLOGY—Intensive Course, two weeks, starting September 25.
Cystoscopy, Ten Day Practical Course, every two weeks.

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Blue Cross plans of the United States and Canada, totalling ninety, paid $96,000,000 for members' care during the first quarter of 1950. Operating expenses were only 8.37 per cent.

— Register Before August 23 —

The First International Congress on Diseases of the Chest will be held at Carlo Forlanini Institute, in Rome, Italy, September 17-22, 1950. For program and information, write Chevalier L. Jackson, M.D., Chairman, 3401 N. Broad Street., Philadelphia, Pa.

— Get Out the Vote —

American College of Surgeons will meet in Boston, October 23-27, 1950. Program is available by writing Paul R. Hawley, M.D., Director, 40 E. Erie Street, Chicago 11, Ill.

— Register Before August 23 —

For the Western Michigan Clinic Day of May 18, sponsored by the Kent County Medical Society, 250 Doctors of Medicine were registered. Guest speakers included Harvey Allen, M.D., Chicago, Richard Kovacs, M.D., New York, John Alexander, M.D., Ann Arbor, W. A. Altemeier, M.D., Cincinnati, Paul Hodges, M.D., Chicago, Richard H. Freyberg, M.D., New York, Alton Ochsner, M.D., New Orleans.

— Get Out the Vote —

St. Clair County Medical Society held its Sixth Annual Clinic Day in St. Clair, Michigan, on June 15. One hundred and eighty-seven were registered and heard Daniel P. Slaughter, M.D., Chicago, Mary S. Sherman, M.D., Chicago, Herbert E. Schmitz, M.D., Chicago, T. Leucutia, M.D., Detroit, L. S. Fallis, M.D., Detroit, and T. J. Wochowski, M.D., Chicago.

— Register Before August 23 —

The Centennial Reunion of the University of Michigan Medical Alumni (Medical School and Hospital) will be held at Ann Arbor, September 28-29-30, 1950, in the Rackham Building. The first day's program will include a symposium on ACTH, Cortisone, and Adrenal Steroids in the morning; a symposium on tuberculosis in the afternoon; and the banquet in the evening.

The September 29 program will include a Clinical Conference in University Hospital in the morning; six lectures by outstanding speakers will be presented in the afternoon; and in the evening the program calls for "Aesculapian Buffoonery."

On September 30, the Convocation will be featured in the morning, with the Michigan-Michigan State game in the afternoon.

For further information write Dean A. C. Furstenberg, M.D., Medical School, Ann Arbor. For football tickets write at once to Ticket Dept., Athletic Office, University of Michigan, Ann Arbor (specify Medical Reunion Section).

MSMS Annual Session
September 20-21-22, 1950
Book-Cadillac Hotel, Detroit
Doctor—You Are Invited!

For housing reservations write Mr. Robert Morgan, Alumni Hall, University of Michigan, Ann Arbor.

— Get Out the Vote —

The International College of Surgeons, United States Chapter, will hold its 1950 Assembly and Convocation in the Cleveland Public Auditorium, Cleveland, Ohio, October 31-November 1-2-3, 1950. For copy of program and information write Arnold S. Jackson, M.D., Secretary, Jackson Clinic, Madison, Wisc.

— Register Before August 23 —

Life Membership in the Wayne University Alumni Association, as well as induction into the Emeritus Club of the Alumni Association, was awarded to the following graduates of the Medical School on the occasion of the Annual Alumni Clinic Day Banquet in Detroit on May 10. Recipients of Golden Anniversary diplomas were Gilbert J. Anderson, M.D., Detroit, Harry H. Learmont, M.D., Croswell, George H. Rigterink, M.D., Hamilton, William J. Stapleton, Jr., M.D., Detroit, Lewis L. Stewart, M.D., Jackson, John VerMeulen, M.D., Grand Rapids, Arthur O. Boulton, M.D., Gladwin, Charles Silas Norton, M.D., Detroit, Dugald Ferguson, M.D., Wardsville, Ont., Frederick Stricker, M.D., San Rafael, Calif., Samual C. Gurney, M.D., San Antonio, Texas, Graham E. Henson, M.D., Jacksonville, Fla., Harry Clay Miller, M.D., San Diego, Calif., Fred L. Seger, M.D., St. Petersburg, Fla., and Donald Waters, M.D., Wisconsin Rapids, Wis.

The oldest living graduate of Wayne University is a Doctor of Medicine: Arthur Hume, M.D., Owosso, a graduate of the class of 1881. Dr. Hume is a Past President of the Michigan State Medical Society.

— Get Out the Vote —

C. H. Peabody, M.D., Lake Odessa, was honored July 2-3 for his fifty years of service to the people of his community. Lake Odessa and all neighboring towns took part in this tribute to the veteran medical practitioner which included open house, a parade of floats with the theme "Progress in Medicine."

Congratulations, Dr. Peabody.

— Register Before August 23 —

L. Fernald Foster, M.D., Bay City, MSMS Secretary, addressed a joint meeting of dentists and pharmacists, in Detroit on May 12; Dr. Foster also spoke on May 21

to the Arenac County Clubs in Sterling, Michigan, on "Socialism and Medical Care"; on June 6, he covered "Public Relations" before the Monroe County Medical Society.

On May 26, Dr. Foster addressed the Essexville Chamber of Commerce annual meeting on "Compulsory Health Insurance—Is This Socialism?"

— Get Out the Vote —

The American College of Physicians will hold its thirty-second annual session at St. Louis, Missouri, April 9-13, 1951. For program, write Ralph Kinsella, M.D., General Chairman, 4200 Pine Street, Philadelphia 4, Pa.

— Register Before August 23 —

The Foundation for the American Society of Plastic and Reconstructive Surgery, Inc. offers prizes of $300 and $200, and certificates of merit "As its 1950 award for essays on some original unpublished subject in plastic surgery." For full particulars, write Clarence R. Straatsma, M.D., 66 E. 79th Street, New York, N. Y.

— Get Out the Vote —

The National Gastroenterological Association announces its course in postgraduate gastroenterology at the New York Statler, October 12-14, 1950. For information, write the Secretary, Dept. GSJ, 1819 Broadway, New York 23, N. Y.

— Register Before August 23 —

The Ortho Award of the American Society for the Study of Sterility includes a grant of $1,000 for an outstanding contribution to the subject of infertility and sterility. For particulars, write the Society, 20 Magnolia Terrace, Springfield, Mass.

— Get Out the Vote —

National Posture Week will be celebrated October 16-21, according to an announcement in JAMA of April 29, placed by the Samuel Higby Camp Institute for Better Posture of New York, founded by S. H. Camp & Company of Jackson, Michigan.

— Register Before August 23 —

The National Society for Crippled Children and Adults will hold its 29th annual convention at the Stevens Hotel, Chicago, October 26-28, 1950. For program, write Executive Director L. J. Linck, 11 S. LaSalle St., Chicago 3, Illinois.

"The people of Great Britain are turning to private health insurance to protect themselves against the evil results of socialized medicine" stated the American Medical Association on June 26, opening day of its Annual Session in San Francisco. According to the retiring president Ernest E. Irons, M.D., of Chicago: "You cannot improve medical care simply by setting up a uniform assembly line system." He pointed to developments in England where private insurance is being advertised because the National Health Service Act has resulted in conditions where "The necessary formalities, the waiting and, finally, treatment in a general ward are disconcerting both in anticipation and in practice."

Dr. Irons went on to say, "Even in Socialistic England the people are finding that they must turn again to private enterprise to protect them against the evils of socialism."

— Get Out the Vote —

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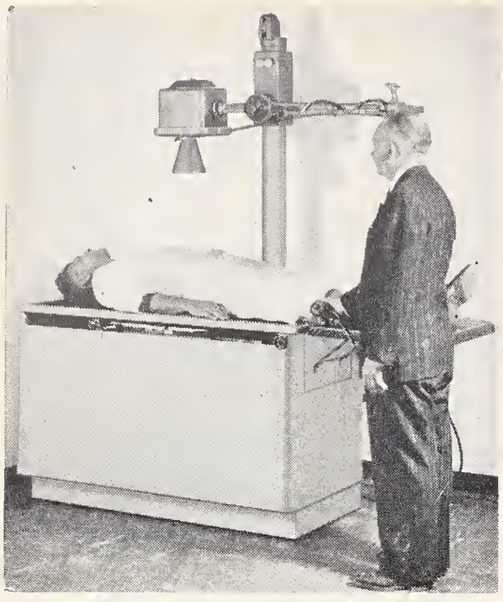

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The Michigan Regional Committee on Trauma, American College of Surgeons, will hold its annual meeting in the Founders Room at the Book-Cadillac Hotel on Thursday noon, September 21, 1950. The business session will follow a luncheon.

The Committee has been active in the state for many years. The main objectives are educational and directed toward projection of programs designed to improve the standards for transportation of the injured, and selected scientific sessions arranged to present the various important phases of the surgery of trauma to the medical profession. In the latter instance, special programs are conducted in various sections of Michigan, under the direction of local Regional Committees, with diversified subjects presented. Hospital staff and County Society meetings are urged to have at least one meeting a year devoted to this surgical field.

At present there are thirty-five members of the Michigan Committee on Trauma. These are appointed by the American College of Surgeons, upon recommendation, and are surgeons who are qualified. This qualification includes a special interest in the surgery of trauma. The membership is allocated according to geographic distribution, as well. Sub-committees on Transportation of the Injured, Education of the Profession, and Rehabilitation of the Injured are in existence and active. There are fourteen localities in the state where local regional committees are functioning. The chairman of each local committee is a qualified member of the State Committee.

From time to time, educational pamphlets are sent out from the American College of Surgeons, the National Committee on Trauma, and the Michigan Regional Committee on Trauma to the membership for further distribution. These are diversified and contain pertinent information in short form relative to selected subjects.

The Wayne University College of Medicine this year has accepted the responsibility of distributing these printed forms to the members of the State and Regional Committees, under the sponsorship of the Detroit Regional Committee on Trauma. This is a most noteworthy contribution. An unusual opportunity to participate in an important Postgraduate Medical Education activity is offered to each member of all committees. It is to be noted that the Michigan Committee on Trauma is one of the most active in the United States.

— Register Before August 23 —

Carl M. Saunders, editor of the *Citizen Patriot* of Jackson, Michigan, was given "home town recognition" at a dinner June 15 for his receiving the Pulitzer award for distinguished editorial writing in 1949. Many Jackson doctors of medicine were present to honor their courageous editor and good friend.

Congratulations, Editor Saunders!

— Get Out the Vote —

Mr. Ewing Denied Funds for Lectures.—Congress feels that Federal Security Administrator Oscar Ewing has no right to use taxpayers' money to finance lectures and trips in behalf of a national compulsory health insurance program.

Dr. Joseph Lawrence of the A.M.A. Washington office

said in his "Capitol Clinic No. 16" that the House denied Mr. Ewing the funds by a one-vote margin.

While the action denied the use of travel funds for propaganda purposes, *the agency still has $4,000,000 available for authorized travel.* This amount, incidentally, is more than the American Medical Association's income for an entire year, even with the increase in dues.—AMA Secretary's letter, May 8, 1950.

— Register Before August 23 —

The Michigan Hospital Association in co-operation with the Michigan Department of Health conducted four institutes on maternity service and infant care for hospital administrators, hospital staff physicians, obstetric nurses, hospital trustees, and the hospital auxiliaries during June.

They were held in the following places on the following dates: Marquette, June 5 and 6; Traverse City, June 7 and 8; Grand Rapids, June 13 and 14; and Detroit, June 15 and 16.

The general subjects for discussion were infant diarrhea and the control of infection in nurseries, parent education and some of the modern trends in maternity nursing care.

— Get Out the Vote —

At the AMA in San Francisco, June 1950, MSMS personnel on various speaking programs included: (a) Secretary L. Fernald Foster, M.D., Bay City, at National Conference of County Medical Society Officers on June 25 was the Leader of the Quiz on "What Do You Know For Sure?"; (b) Executive Director Wm. J. Burns, Lansing, led a panel discussion on "Our Greatest Problem" at the annual meeting of the Medical Societies Executives Conference on June 28; (c) Legal Counsel J. Joseph Herbert served as chairman of the Conference of State Society Legal Counsels.

— Register Before August 23 —

The 1951 Michigan Postgraduate Clinical Institute will be held at the Book-Cadillac Hotel, Detroit, on Wednesday, Thursday, Friday, March 14-15-16, 1951.

The second annual Michigan Heart Day, sponsored by the Michigan Heart Association, will be held on Saturday morning, March 17, 1951, at the Book-Cadillac Hotel, Detroit, followed by luncheon and election of officers of the MHS.

— Get Out the Vote —

Payments totaling $3,139,307,000 were made by the nation's life insurance companies to American families in the first 11 months of 1949 according to tabulations of the Institute of Life Insurance. This is $235,573,000 greater than the amount paid in the comparable period last year. Payments to living policyholders constituted 57 per cent of the total, up 2 per cent from a year ago.—Insurance Economics Society of America, February, 1950.

— Register Before August 23 —

John B. Barnwell, M.D., formerly of Ann Arbor, and now Chief of the Tuberculosis Division of the Veterans Administration Department of Medicine and Surgery, received the 1950 award of the National Tuberculosis Association—the Trudeau medal—for his accomplishments in the fight against tuberculosis.

Dr. Barnwell was associated with the University of Michigan Medical School from 1928 to 1946. He was president of the American Trudeau Society in 1943.

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"Not to Vote at this Time Constitutes Treason"—J. E. MANNING, M.D., Saginaw, at "Good Citizenship Campaign" Meeting of May 7, in Lansing.

— Register Before August 23 —

"In the 1948 elections, 124 seats in Congress were won with a vote margin of less than 5 per cent.—*Detroit Free Press,* May 5, 1950.

— Get Out the Vote —

J. S. DeTar, M.D., Milan, MSMS Councilor, addressed the following groups in May-June:

May 12: Michigan Association of pharmaceutical representatives. "Socialized Medicine and the Pharmaceutical Profession."

May 15: Wayne University Senior Class: "Compulsory Medical Insurance; Its effect on the Medical Graduate."

May 23: Ann Arbor Optimist Club: "Socialized Medicine: Do We Really Want it?"

May 25: Monroe Kiwanis Club: "The Hoover Commission Findings: Their Relation to the Problem of Socialism."

June 1: University of Michigan Medical School Senior Class: "Compulsory Medical Insurance: Its effect on the Medical Graduate."

— Register Before August 23 —

Loyola University Medical Alumni will hold a dinner meeting during the Michigan State Medical Society Annual Session on Thursday, September 21, Pan American Room, Book-Cadillac Hotel, 6:30 P.M. Wives of alumni are cordially invited.

Wayne County Medical Society's new officers for 1950-1951 are: W. W. Babcock, M.D., President; Arch Walls, M.D., President-Elect; G. Thomas McKean, M.D., Secretary; Douglas Donald, M.D. (Immediate Past President) elected to the Board of Trustees.

The new editors of the *Detroit Medical News* are F. A. Weiser, M.D., with Associates Ralph A. Johnson, M.D., James J. Lightbody, M.D., Wm. S. Reveno, M.D., E. D. Spalding, M.D., and D. I. Sugar, M. D.

— Register Before August 23 —

Lee E. Kelsey, M.D., of Lakeview, was honored by the citizens of his community on June 2 with a testimonial dinner and open house in connection with the commencement activities of the Lakeview High School. This commemorated the 50th Anniversary of Dr. Kelsey's graduation from Lakeview Community High School.

Congratulations Dr. Kelsey!

— Get Out the Vote —

Michigan Represented at AMA Meeting

Michigan Doctors of Medicine who had Scientific Exhibits at the AMA meeting in San Francisco were: E. S Gurdjian, M.D., J. E. Webster, M.D., and H. R. Lissner M.D., all of Detroit, presented their exhibit "Skull Fractures—Types and Mechanism of Production." A. Bunser Lerner, M.D., Ann Arbor, on "Melanin Pigmentation—Biochemistry and Clinical Applications."

Also another exhibit by a Michigan man—Reuben L Kahn, Ph.D., Ann Arbor, on "Universal Serologic Reaction in Health and Disease."

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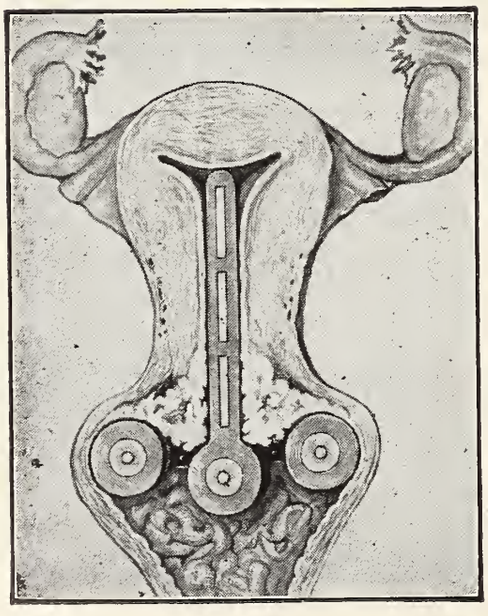

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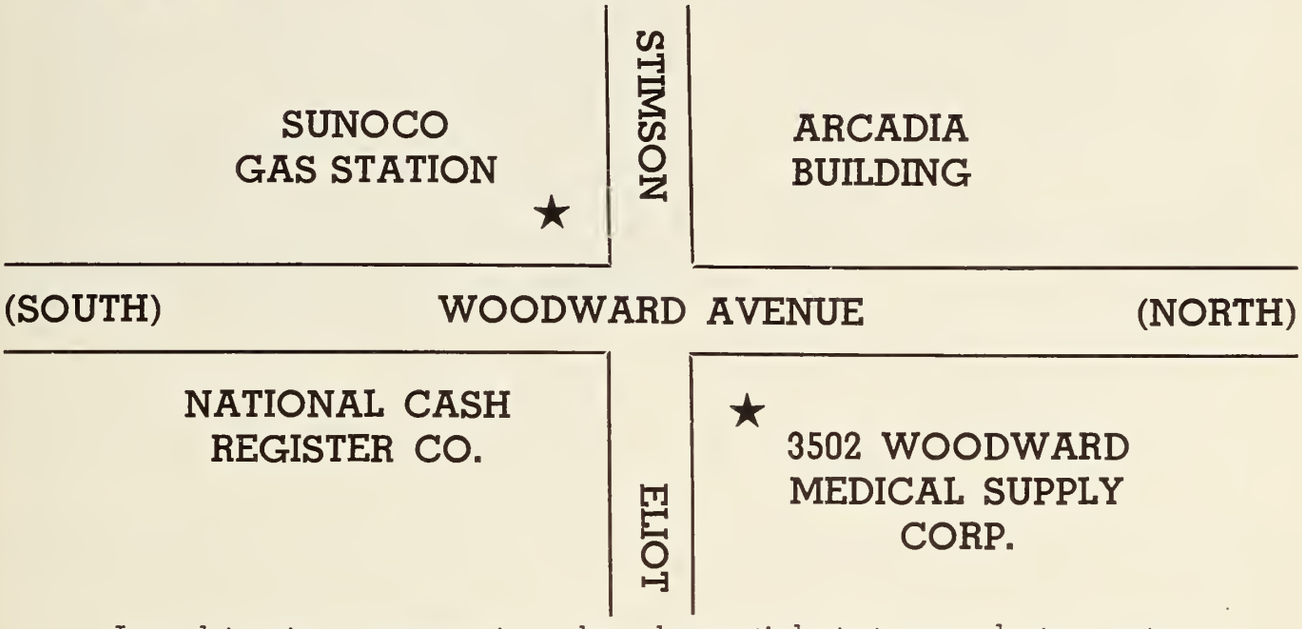

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The following gave demonstrations in the Special Exhibit on Fractures: Vernon C. Abbott, M.D., Pontiac, Donald R. Brasie, M.D., Flint, Hardie B. Elliott, Jr., M.D., Flint.

Jerome W. Conn, M.D., Ann Arbor, presented "Potassium in Diabetic Coma" before the Clinical Conference on Diabetes. Also Dr. Conn was one of several to discuss the various papers under Symposium on ACTH and Cortisone.

The following presented papers before the General Scientific Meetings: J. P. Pratt, M.D., Detroit, on "Use and Abuse of Estrogens." Dr. Pratt also opened a discussion on "Endocrine Patterns in Term Pregnancy After Abortion" before the Section on Obstetrics and Gynecology.

A. D. Ruedemann, M.D., Detroit, presented "Head Pain and Headache from Ocular Origin" before Section on General Practice.

Edward P. Cawley, M.D., Arthur C. Curtis, M.D., and James E. K. Leach, M.D., Ann Arbor, presented "Is Mycosis Fungoides a Reticuloendothelial Neoplastic Entity" before the Section on Dermatology and Syphilology.

F. H. Bethel, M.D., A. A. Cintron-Rivera, M.D., S. Miller, M.D., Ann Arbor, et al, presented "Oral Administration of Vitamin B_{12} in the Treatment of Pernicious Anemia" before the Section on Experimental Medicine and Therapeutics.

S. S. Scheinberg, M.D., Detroit, and others presented "Hormone Studies in Peptic Ulcer: ACTH and Cortisone; Preliminary Report" before the Section on Gastro-Enterology and Proctology.

H. Marvin Pollard, M.D., and Arnold Wollum, M.D., Ann Arbor, presented "The Role of Blood Transfusion in the Management of Bleeding Peptic Ulcer" before the Section on Gastroenterology and Proctology.

Winfred B. Harm, M.D., Detroit, is on the Executive Committee of the Section on General Practice.

J. Milton Robb, M.D., Detroit, is Secretary of the Section on Laryngology, Otology and Rhinology.

Clifford D. Benson, M.D., opened a discussion on "Intestinal Obstruction in the Newborn Infant" before the Section on General Practice.

E. S. Gurdjian, M.D., and John E. Webster, M.D., presented "Surgical Management of Cerebrovascular Accidents" before the Section on Nervous and Mental Diseases.

Carl E. Badgely, M.D., Ann Arbor, presented "Fibroelastic Diathesis" before the Section on Orthopedic Surgery.

Alan Raftery, M.D., Detroit, presented a paper on "Subclinical Histoplasmosis: Gastrointestinal Histoplasmosis in Children" before the Section on Pathology and Physiology. The discussion following this paper was opened by F. W. Hartman, M.D., Detroit.

Wyman C. C. Cole, M.D., Detroit, is Secretary of the Section on Pediatrics.

Leo H. Bartemeier, M.D., Detroit, opened the discussion on "A Three Year Study of a Compulsory Rooming-In Program for Newborn Infants" before the Section on Pediatrics.

M. R. Burnell, M.D., A. H. Whittaker, M.D., Detroit, and others, opened the discussion on the Symposium on

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"The Specialist Looks at Everyday Medical Care in Industry" before the Section on Preventive and Industrial Medicine and Public Health.

Robert W. Buxton, M.D., and Frederick A. Coller, M.D., Ann Arbor, presented "Conservative Management of Acute Cholecystitis" before the Section on Surgery, General and Abdominal.

Reed M. Nesbit, M.D., Ann Arbor is on the Executive Committee of the Section on Urology. Dr. Nesbit presented "Significance of Serum Acid Phosphatase of Determination in the Diagnosis and Prognosis of Prostatic Cancer" before this Section.

Ormond S. Culp, M.D., and James Barron, M.D., Detroit, presented "Early Recognition and Treatment of Venous Thrombosis in Urologic Patients" before the Section on Urology.

Delegates from Michigan: W. A. Hyland, M.D., Grand Rapids, W. D. Barrett, M.D., Detroit, R. L. Novy, M.D., Detroit, W. H. Huron, M.D., Iron Mountain, R. A. Johnson, M.D., Detroit.

Grover C. Penberthy, M.D., Detroit, is a Delegate from the Section on Surgery, General and Abdominal.

— Register Before August 23 —

Of all Michigan deaths from tuberculosis last year. 11.7 per cent were first reported as cases by death certificate. In other words, 164 of Michigan's 1,400 tuberculosis deaths in 1949—more than one in every eight—were reported as cases of tuberculosis for the first time on death certificates. These figures are based on a study by the Michigan Department of Health on case reporting by source. The means of early diagnosis in tuberculosis are known.

Michigan Tuberculosis Association

Michigan Authors:

Thomas M. Batchelor, M.D., and Gordon M. Todd, M.D., of Detroit, were authors of an original article entitled "Aureomycin and Penicillin Therapy in Weil's Disease" which appeared in JAMA of May 6, 1950.

Meyer O. Cantor, M.D., of Detroit is the author of an original article "Effect of Variations in the Amount of Mercury on the Speed of Intestinal Intubation" which appeared in the April *Archives of Surgery.*

Charles H. Frantz, M.D., Grand Rapids, is the author of an original article "Methenesin in Cerebral Palsy" which was published in JAMA of June 3.

Henry J. VanDuine, M.D., Grand Rapids, is the author of "Postoperative Tetanus" which appeared under Clinical Notes in JAMA of May 13, 1950.

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John M. Sheldon, M.D., Robert G. Lovell, M.D., and **Kenneth P. Mathews, M.D.,** Ann Arbor, by invitation published a paper, "Symposium: Allergy Immunologic Aspects of Allergy," in the *Transactions of the American Academy of Ophthalmology and Otolaryngology,* March-April, 1950.

A. D. Ruedemann, M.D., Detroit, published a paper, "Beta Radiation in Industrial Ophthalmology," in the *Transactions of the American Academy of Ophthalmology and Otolaryngology,* March-April, 1950.

James A. Olson, M.D., E. H. Steffensen, M.D., R. R. Margulis, M.D., Richmond W. Smith, M.D., and **E. L. Whitney, M.D.,** of Detroit published a paper, "ACTH in Ophthalmologic Conditions," in *The Journal of the American Medical Association,* April 22, 1950.

J. S. DeTar, M.D., Milan, published an article, "Medicine and the Hoover Report," in GCP, journal of the American Academy of General Practice, June, 1950.

— Get Out the Vote —

Michigan Pathological Society

On Saturday, May 13, 1950, the Michigan Pathological Society held its spring meeting jointly with the North Central Regional Group of the College of American Pathologists at the Detroit Institute of Cancer Research.

In the morning, papers were presented by Lawrence Berman, M.D., John W. Rebuck, M.D., Walter Seegers, M.D., Robert L. Novy, M.D., E. Dwight Barnett, M.D., all of Detroit, and C. D. Cummings, M.D., of Lansing.

The afternoon session was a seminar on Pathologic Anatomy associated with Hematological Diseases. Cases were presented by various members of the Michigan Pathological Society and Maurice N. Richter, M.D., of the Department of Pathology of the Bellevue Medical Center, New York City, served as Moderator. R. E. Olsen, M.D., President of the Michigan Pathological Society, presided.

— Register Before August 23 —

United Medical Service of New York, "The Doctors' Plan" as of April 30, 1950, had 1,738,364 Subscribers and 18,196 Participating physicians. In 1949 they paid for medical care to their subscribers $6,781,596.00.

— Get Out the Vote —

Washington Setting Up Civil Defense "Pilot Operation."—Physicians of Washington, D.C., are out in the lead in preparing their part of a municipal emergency defense plan. The *Washington Post* comments: ". . . the *doctors* have shown themselves anxious to co-operate and are far more ready than the District Commissioners." Plans now being worked out by private and public organizations will be submitted to the National Security Resources Board. Later the blueprints, with any NSRB amendments or recommendations, will be sent on to *Seattle*. Seattle, in turn, will review the plans, possibly try them out in modified form, then send them to *Chicago*. Chicago will repeat the process. NSRB hopes that out of the three-city effort will come a program suitable for adaptation to other cities.

— Register Before August 23 —

The legislatures of thirteen states have now adopted resolutions expressing themselves against socialized medicine: Alabama, Mississippi, Delaware, Massachusetts, Nebraska, Arkansas, Tennessee, Utah, Florida, Texas, Michigan, Maryland and Illinois.

— Get Out the Vote —

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Chester's thirty-six doctors are earning only an average of £1,230 a year compared with the £4,840 earned by each of the city's 24 dentists, Mr. G. B. Elphick, finance committee chairman, told Chester National Health executive council.

"It is difficult to measure responsibility and the priority of service, but the men who looked after the life and death of the town should receive adequate remuneration," he said.

T. L. Gilbride, a dentist, said the dentists served a very large area, not only the county borough of Chester.

B. A. Williams, the chairman, said there was little they could do about it, and they must leave it to "the powers that be" to lay down rates of remuneration.—*Daily Mail,* London, England, May 15, 1950.

— Register Before August 23 —

Regular Corps Examination for Medical Officers, USPHS.—A competitive examination for appointment of Medical Officers in the Regular Corps of the United States Public Health Service will be held on October 9, 10, and 11, 1950. Examinations will be held at a number of points throughout the United States, located as centrally as possible in relation to the homes of candidates. Applications must be received *no later than September 11, 1950.*

The Regular Corps is a commissioned officer corps composed of members of various medical and scientific professions, appointed in appropriate categories such as medicine, dentistry, nursing, engineering, pharmacy, etc.

Appointments will be made in the grades of Assistant Surgeon (equivalent to Army rank of First Lieutenant) and Senior Assistant Surgeon (equivalent to Captain). In making assignments, consideration is given to the officer's preference, ability, and experience; however, all commissioned officers are subject to change of station and assignment as necessitated by the needs of the Service. Appointments are permanent in nature and provide opportunities to qualified physicians for a life career in clinical medicine, research, and public health. Applicants who successfully complete this examination may ordinarily expect appointment as soon as they become eligible.

Application forms may be obtained by writing to the Surgeon General, United States Public Health Service, Federal Security Agency, Washington 25, D. C., Attention: Division of Commissioned Officers.

— Get Out the Vote —

Reorganization Plan No. 27, would make FSA into a cabinet-rank Department of Health, Education and Security. It is important to keep this fact in mind for the *next two months:* Unlike usual *legislation,* this plan will not die a natural death should Congress adjourn without acting upon it. (There is one exception: a possibility of Congress adjourning before July 31. If this should happen, the plan would automatically die.) If Congress takes no action on this plan, yet stays in session through July 31, Mr. Truman *automatically* will be authorized to set up the new department. Ignoring this proposal will not defeat it—the only way to stop it is for either Senate or House to disapprove it by a majority vote of *all* members, not just all members present on the *day of the vote.*

New York and Washington papers gave moderate space

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to the proposal when it was sent to Congress. Radio gave it approximately the same treatment. From now until time for a vote, it is likely the plan will not receive much public attention. However—it could become law *without* much further public attention—it must be actively opposed, not ignored or left to the good judgment of Senate and House Committees.

This year's plan for a Health-Education-Security Department is changed *only slightly* from last year's, which the AMA opposed and which the Senate defeated last August 16 by vote of 60 to 32. It is a reasonable assumption, therefore, that Plan No. 27 *could* have been sent up to Congress weeks or months ago, along with other plans. It wasn't. Instead Mr. Truman waited as long as he could, under the circumstances. The result is that he has created the following *not unfavorable* situation on Capitol Hill:

1. The plan was submitted on May 31. Unless vetoed by either House, it becomes law on July 31.

2. Under Congress's official schedule of operations the session should be adjourned by July 31. As President, Mr. Truman could not, logically and officially, assume that Congress would continue beyond this "legal" deadline, even though the session may last beyond that date.

3. This gives the plan an important technical advantage. Congress must debate it near the close of its session, when the Senate is weighted down with half a dozen other major bills, or see it become law. The Senate situation is particularly significant, because it was the *Senate* which overwhelmingly rejected the same plan a year ago. The House has plenty of time to debate this plan, but there is no evidence that the House is as strongly opposed to the idea as was the Senate.

— Register Before August 23 —

Some Census Enumerators Reducing Physicians' Work Week.—We have received a few reports of census enumerators telling physicians that *60 hours* is the *maximum* work-week that may be reported. If this practice is widespread, it could mean a *gross underestimate* of the average physician's hours of work in the final, official tabulation. Where enumerators are following this practice they are acting in violation of standing census regulations. Lowell Galt, head of the Census Bureau's field division, said enumerators have been ordered to report *all work* done the previous week, when the form calls for such data. In professional work, he said this means total hours spent at the profession, not merely time spent in actual consultation or treatment. Mr. Galt said the Bureau is anxious to make corrections in every case where enumerators have *arbitrarily reduced the reported work week.* District Census superintendents should be contacted, or if the district office has been closed out, Mr. Galt's office in Suitland, Md.

— Get Out the Vote —

New AMA Directories.—After three years of work, the 18th edition of the AMA directory has been completed and copies are now being shipped to subscribers.

The edition, the first since 1942, was compiled under extereme difficulties, and Editor Frank V. Cargill says that "it was only with the co-operation of the medical profession and allied organizations that it was possible to produce a directory of this scope."

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The long interval of eight years between the new directory and the previous one made it necessary to set new type on the entire book. The loss of experienced clerical help during the war, labor conditions and printing difficulties also contributed to the delay.

The new directory contains 2,913 pages, and lists information on 219,677 physicians in the United States, its dependencies, and Canada. It also lists American graduates and licentiates located temporarily abroad. Since the 1942 directory, thousands of changes of address have been made; 51,984 names have been added, and 28,242 names dropped from the book on account of death or for other reasons.

— Register Before August 23 —

Federal Bureau of Investigation agents have completed their job with AMA headquarters.

From four to six agents have spent the last seven months scanning the voluminous files and records at AMA headquarters. When the agents started their job last October, Attorney General Howard McGrath, former chairman of the Democratic National Committee, announced in Washington that the Justice Department wanted to know if any monopoly existed in connection with prepaid medical care plans.

During the course of their work, the agents had many letters and records reproduced, photostatically. The AMA legal department also has matching copies of the same records for its files.

It is understood that all the information obtained by the agents will now be forwarded to the Justice Department in Washington.

— Get Out the Vote —

The American College of Physicians North Central regional meeting will be held in Madison, Wisconsin, on November 18, 1950. Registration will begin at 8:00 A.M. and the meeting will consist of a series of scientific papers presented throughout the day. A scientific exhibit of wide general interest is planned in connection with the meeting.

This gathering will be held in the Wisconsin Union Theater on the campus of the University of Wisconsin, which promises the best in physical facilities. A luncheon will be served in the Wisconsin Union at noon for all registrants wishing to participate.

It is to be especially noted that this postgraduate instructional session is open to all interested physicians whether or not they are members of the American College of Physicians. Members of the College are urged to bring along their colleagues as guests.

At a later date the entire program will be printed in this publication for the information of all physicians.

— Register Before August 23 —

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A CENTURY OF MEDICINE IN JACKSONVILLE AND DUVAL COUNTY. By Webster Merritt, M.D. 220 pages, 44 illustrations. Gainesville, Florida: University of Florida Press, 1949. Price $3.50.

The author of this book has presented a complete picture of the practice of medicine in Florida, giving pictures of men and hospitals, quarantine by shotgun, and interesting places. Many of the older doctors have been well written up. The research work to amass so much of interest must have been prodigious. The medical profession of Florida and others interested in the beginnings of the practice of medicine in the United States will benefit, as will future historians. The book is most attractive and challenging in its presentation.

CARDIOVASCULAR DISEASES. Fundamentals, Differential Diagnosis, Prognosis and Treatment. By Louis H. Sigler, M.D., F.A.C.P. Attending Cardiologist and Chief of Cardiac Clinic, Coney Island Hospital; Consulting Cardiologist, Rockaway Beach Hospital; Consulting Cardiologist, Menorah Home and Hospital for the Aged. New York: Grune & Stratton, 1949. Price, $10.00.

In this text, the author presents the clinical aspects of cardiovascular disease. For proper interpretation of each diseased state, adequate attention is paid to the physiologic, etiologic, pathologic and pathogenic features of the disease. Psychosomatic aspects are stressed throughout also. The clinical manifestations, the diagnosis and differential diagnosis of each disease is clearly presented. The prognosis is discussed in each instance from a viewpoint of the clinical manifestations in the given case. Therapy is considered from a broad constitutional viewpoint with special reference to latest measures in use.

There are thirty-one chapters in the text, fully illustrated by clinical material, roentgenologic findings, pathologic specimens and many original drawings and illustrations. This is an attempt to cover all problems the physician is called upon to solve in the course of practice and the author is to be commended for the result. The bibliography is very adequate and the references have been selected for the average findings of competent observers.

This text can be recommended as an addition to the library of any medical man. It gives quick reference to a thorough discussion of all aspects of cardiovascular disease, not in great technical detail, but in a simplified presentation of all essential facts.

G.W.S.

MEDICINE OF THE YEAR. Second Issue, Editorial Direction. John B. Youmans, M.D., Dean, School of Medicine, Vanderbilt University. Philadelphia: J. B. Lippincott Company, 1950. Price $5.00.

The second volume of this review of medicine for the year 1949 follows the same plan as for the preceding year. A list of collaborators has been chosen and a careful study made of medical advances in the major fields of Internal Medicine, Psychiatry, Obstetrics and Gyne-

cology, Pediatrics and General Surgery. A careful review is given of the progress and reports with a reference list following each chapter. The book is completely up to date as is testified by the article on ACTH. This article is detailed, factual, and quite up to the minute.

The review is well done, easily readable, and is published in two volumes on large pages. This has an advantage in that it does away with the bulkiness that would be necessary if the work were published as a single book.

CURRENT THERAPY, 1950. Latest Approved Methods of Treatment for the Practicing Physician. Editor: Howard F. Conn, M.D., Consulting Editors: M. Edward Davis, Vincent J. Derbes, Garfield G. Duncan, Hugh J. Jewett, William J. Kerr, Perrin H. Long, H. Houston Merritt, Paul A. O'Leary, Walter L. Palmer, Hobart A. Reimann, Cyrus C. Sturgis, Robert H. Williams. 736 pages. Philadelphia: W. B. Saunders Co., 1950. Price $10.00

It is presumed that accurate diagnosis has been made before one attempts any treatment that might obscure or confuse the diagnosis.

This is a carefully written volume representing the newest and latest proven treatments to which over 260 instructors and professors have contributed. Their work has been reviewed by an eminent staff of twelve consultants in the various fields of medicine.

In many instances, more than one author has written on the same subject. Thus varied opinions are expressed. On the treatment of syphilis for the various types and ages, nine men have outlined their methods.

The procedure of treatment, in many instances: The physician is advised what not to do before a more specific outline of the treatment of choice is given.

In its second year of publication, this book is valuable for the specialist and general practitioner alike.

PROCTOLOGY IN GENERAL PRACTICE. By J. Peerman Nesselrod, B.S., M.S., M.Sc. (Med.), M.D., F.A.C.S., F.A.P.S., Associate in Surgery, Northwestern University Medical School; Associate Surgeon, Division of Proctology, Evanston Hospital, Evanston, Illinois; Certified by the Central Certifying Committee in Proctology (Founders' Group) of the American Board of Surgery; Commander (MC), USNR. Illustrated. Philadelphia: W. B. Saunders Co., 1950. Price, $6.00.

This book is a good reservoir of knowledge and ideas of the field of proctology, particularly the phases of anorectal conditions and the colitides. The above knowledge and ideas are amply backed by accurate observations and long repeated successful applications of the principles set forth.

The author describes in detail the various common proctological procedures which should be of great value to the intern, resident, general practitioner and surgeon when he is confronted with diseases of the rectum, anus and colon. The colored pictures of procto-sigmoidoscopic findings should be a valuable reference to one wishing to learn proctology.

PARALYSIS OF DISTAL JEJUNAL LOOP

(Continued from Page 798)

3. If reoperation is decided upon, entero-enterostomy will not prove to be beneficial.

4. Keeping the stomach empty and tubal feeding until the atony corrects itself is the procedure of choice.

5. All patients reoperated upon and having an entero-enterostomy died shortly after the second operation.

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Reference

1. Kennedy, C. S.; Reynolds, R. P., and Cantor, M. O.: A study of the gastric stoma after partial gastrectomy. Surgery, 22:41-47, (July) 1947.

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EMOTIONAL ATTITUDES OF INFANTS

(Continued from Page 801)

This vital phase of character formation is difficult for the parents. They are not prepared by experience of teaching for drastic changes. Arbitrary behavior on the part of the parents about diet and toilet training invites them more trouble. They restrict the few outlets for expanding the personality of the year-old child. A small number of children per family nowadays encourages parental overconcern. There tend to be too many prohibitions, too many demands, and too many clashes. The child's out-goingness is blocked; his progress toward independence is impeded and his self-awareness is intensified beyond what is ideal.

In the past, parents with poor qualities of leadership probably relied mostly on physical punishment, but modern teaching, stating that this type of treatment is shameful, has deflected them into forms of control such as chronic scolding, prolonged moral disapproval, warnings of dangerous consequences of misbehavior, and even excessive reasoning and overexplanation. These influences are manifested by the age of two years in tense, anxious, dependent, self-centered children, and lay the groundwork for the formation of specific neuroses and character disorders.

References

Collected Papers of the Cornelian Corner.

Gesell, Arnold, and Ilg, Frances: Infant and Child in Culture of Today. New York: Harper and Bros., 1943.

Spock, Benjamin: The Common Sense Book of Baby and Child Care. New York: Duel, Sloan, and Pierce, 1946.

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Slow healing burns produce potentially malignant scars more frequently than those that heal quickly.

. . .

Scars of rapidly healing burns are pliable and soft; burns which heal slowly leave scars of fibrotic avascular tissue in which cancer may develop.

. . .

Leukoplakia is present in from 12 to 50 per cent of all patients with vulvar and oral cancer.

. . .

Not infrequently, leukoplakia is found in areas of chronic irritation caused by ill fitting dentures, bad teeth, pessaries, et cetera.

. . .

The earliest sign of leukoplakia is loss of skin elasticity followed by pruritus, burning and perhaps dyspareunia.

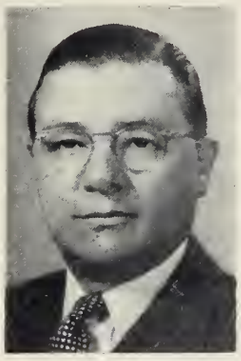
. . .

The age of the patient is a most important factor in determining clinically whether an ovarian tumor is malignant.

THE JOURNAL
of the Michigan State Medical Society

VOLUME 49 AUGUST, 1950 NUMBER 8

Contributors to this Issue



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GABRIEL STEINER, M.D.

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MSMS ANNUAL SESSION

September 20-21-22, 1950

Book-Cadillac Hotel
Detroit

DOCTOR—YOU ARE INVITED

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of the Michigan State Medical Society

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L. G. Christian, M.D., Lansing.....1951
W. A. Hyland, M.D., Grand Rapids 1951

Alternates

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A. S. BRUNK, M.D., HONORED

The Conference of Presidents and Other Officers of State Medical Societies, at its June 25, 1950, Session in San Francisco, honored its first President, A. S. Brunk, M.D., of Detroit, by presenting him with a Past-President's gavel. The presentation of the award was featured by the following statement:

"On December 2, 1945, this Conference held its first annual meeting in Chicago, at which Dr. Andrew S. Brunk, of Detroit, Michigan presided, and was subsequently elected as the first president, serving for the year 1945-46.

"A past president of the Wayne County Medical Society, and of the Michigan State Medical Society, Doctor Brunk saw this Conference through its formative years.

"He has given generously of his time and energy in medical care and public health service. He was the first president of the Michigan Health Council. He has served on the executive committee of Michigan Medical Service since 1939, and is a member of its board of directors. During the same period he acted on the executive committee of Michigan Hospital Service and he is also a trustee of that organization. He founded the Martin Place Hospital, and today is secretary-treasurer of that institution.

"Belatedly, but nevertheless most sincerely, this Conference again pays tribute to Dr. Brunk for his fine leadership, and awards to him this gavel as a souvenir of his Presidency."

Congratulations, Dr. Brunk!

Vote at the Primaries on September 12.

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of June 14, 1950

- Monthly financial reports, including the Public Education Account and the Public Education Reserve Account, were presented, studied and approved.

  Bills payable for the current month were presented and ordered paid.
- Compulsory reporting of communicable diseases: the MSMS Legal Counsel presented a written opinion on this subject which was thoroughly discussed. Copies of this opinion with letters of transmittal were ordered to be sent to the Michigan Pathological Society, and to the Wayne County Medical Society after this matter had been discussed with the Michigan Health Commissioner at the July Session of The Council.
- Upon recommendation of President-elect C. E. Umphrey, M.D., The Council authorized the sending of letters to the chairmen and members of all MSMS Committees stressing the importance of the "Good Citizenship Campaign" and requesting that no Committee meetings be held until after November 7, 1950.
- The Council authorized a four-page insert in JMSMS during July, August and September, two pages to be utilized by the MSMS Public Relations Department as a report on the "Good Citizenship Campaign," and two pages by Michigan Medical Service as a report on its activities and progress.
- Michigan's Foremost Family Physician for 1950: The Secretary was authorized to contact Michigan county medical societies asking for nominations.
- March 17, 1951, was reserved for the second Michigan Heart Day sponsored by the Michigan Heart Association, to be held at the Book-Cadillac Hotel, Detroit, immediately following the 1951 Michigan Postgraduate Clinical Institute.
- Associate Fellowship in the AMA was requested for Carl A. Mitchell, M.D., Benton Harbor, and Arthur K. Northrop, M.D., Detroit.
- Fleming A. Barbour, M.D., Flint, was appointed to the MSMS Committee of Ophthalmologist, Advisory to the Michigan Department of Health.
- Ubiquitous Hosts for the 1950 MSMS Annual Session, as nominated by C. E. Umphrey, M.D., Chairman of the Committee on Arrangements, were approved.
- Emergency Medical Service Committee: Chairman H. F. Becker, M.D., reported on plans of his Committee; these were approved and ordered presented to the Governor at once—because of the urgency of this matter.
- Press Committee for 1950 MSMS House of Delegates: J. E. Livesay, M.D., Chairman, L. Fernald Foster, M.D., Harry F. Dibble, M.D., and E. F. Sladek, M.D., were appointed.
- The Public Relations Counsel's progress report included: (a) "Good Citizenship Campaign"

(Continued on Page 894)

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HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

(Continued from Page 892)

activities; (b) Completion of the MSMS Speakers Manual; (c) Report on AMA National Advertising Program; (d) Candidates are being interviewed for position of P. R. Field Representative to take the place left vacant by the resignation of John Guy Miller, recently appointed Executive Secretary of the St. Louis (Missouri) Medical Society; (e) The MSMS motion pictures "To Your Health" and "Lucky Junior" are being placed in additional Michigan theaters, in highly satisfactory numbers.

- Committee reports were heard from (a) Tuberculosis Control Committee, meeting of May 21; (b) Mental Hygiene Committee, meeting of May 23; (c) Subcommittee on Cinema (of the Public Relations Committee), meeting of May 25; (d) Joint Committee on Study of Medical Practice Act, meeting of May 25; (e) Subcommittee on Publications (of the Public Relations Committee), meeting of May 31; (f) Advisory Committee to the State Nurses Board, meeting of June 3; (g) Program Committees of the Calhoun, Genesee, Ingham, Jackson and Kent County Medical Societies, meeting of June 8; (h) Medical Jurisprudence Committee of State Bar of Michigan, meeting of June 10; (i) Committee on Public Meetings (of Public Relations Committee), meeting of June 14.

Vote at the Primaries on September 12.

RESEARCH IN ARTHRITIS

The Arthritis and Rheumatism Foundation is offering fellowships for research in the basic sciences related to the study of arthritis. These fellowships carry a stipend of from $4,000 to $6,000, depending upon the needs and ability of the worker, and run for a period of one year. The fellowships would begin in July 1951, although earlier appointments would be considered by the committee.

The Foundation is eager to back a candidate, rather than a project, an institution, or a hospital. It hopes to arouse interest in arthritis in a wider circle of medical investigators and to encourage able, inquiring minds.

Applications should be sent to the Arthritis and Rheumatism Foundation, 535 Fifth Avenue, New York 17, New York, by January 1, 1951. Notification of the fellowships granted will be made March 1, 1951.

If any applications are received by September 15, 1950, they will be acted on at that time and notification made immediately.

MEDICAL MEETINGS AND CLINIC DAYS

A list of known medical meetings and clinic days, sponsored by county medical societies and other physicians' groups in Michigan, follows:

January 31, 1951	Mt. Carmel Mercy Hospital Clinic Day Detroit
February 8, 1951	Jackson County Medical Society's Clinic Day Jackson
March 6, 1951	Calhoun County Medical Society's Clinic Day Battle Creek
March 14-15-16, 1951	MICHIGAN POSTGRADUATE CLINICAL INSTITUTE Detroit
March 17, 1951	MICHIGAN HEART DAY Detroit
April 4, 1951	SECOND MICHIGAN INDUSTRIAL HEALTH DAY Detroit
April 11, 1951	Genesee County Medical Society's Cancer Day Flint
May 3, 1951	Ingham County Medical Society's Clinic Day Lansing
May, 1951	Western Michigan Clinic Day (Sponsored by Kent County Medical Society) Grand Rapids
May, 1951	Bay County Medical Society Physical Medicine Conference
June, 1951	St. Clair County Medical Society's Clinic Day St. Clair
July 26-27, 1951	Annual Coller-Penberthy Medical-Surgical Conference (sponsored by Grand Traverse-Leelanau-Benzie County Medical Society) Traverse City
Sept. 26-27-28, 1951	MICHIGAN STATE MEDICAL SOCIETY ANNUAL SESSION Grand Rapids

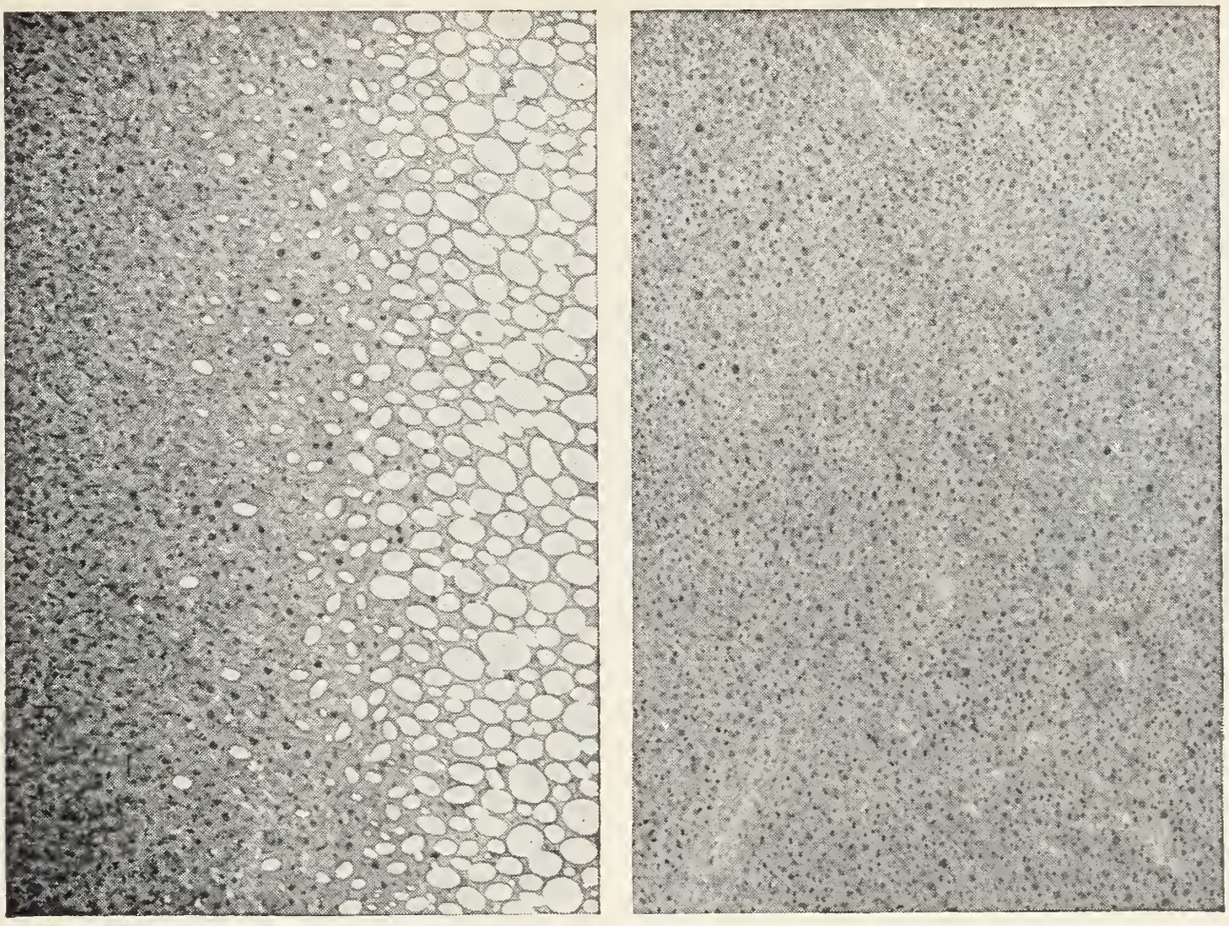
Additions to this list of meetings are invited by the Editor of JMSMS, in order to make this monthly announcement complete and accurate.

Vote at the Election of November 7.

DOCTORS' INCOME SURVEY SETS RECORD FOR SIZE OF RESPONSE

All records for professional group surveys of this nature, with regard to volume of replies received, have been broken by Commerce Department's current poll of physicians on their income levels. (It will be several months, of course, before results of the study are published). Approximately 45,000 of the 100,000 white forms which were mailed out have been filled in and returned to Washington. Of 10,000 buff-colored questionnaires distributed, 4,500 are back at Commerce and more than one-third of the 15,000 greens have now been returned.

WRMS, July 10, 1950.



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Michigan Rural Health Conference
October 20-21, 1950

E. I. Carr, M.D.
Chairman

Michigan's Annual Rural Health Conference is fast establishing an important position for itself on this state's Autumn Calendar of Health Events.

The Conference, which again is sponsored financially by the Michigan Foundation for Medical and Health Education, Inc., will be held Friday and Saturday, October 20, 21, on the campus of Michigan State College at East Lansing. E. I. Carr, M.D., Lansing, President of the Foundation, was unanimously elected to serve again as General Chairman of the Conference.

Originally organized and developed four years ago by the Michigan State Medical Society, the first Conference brought together thirty important health organizations as co-sponsors and presented a two-day program featuring topical group discussions.

The Second Michigan Rural Health Conference in 1948 and the Third Conference in 1949 saw a steady growth in scope, attendance, co-sponsorship and importance. That expansion has continued this year, and to date sixty-five Health organizations of Michigan have agreed to act as co-sponsors of the 1950 Rural Health Conference.

Taking important characteristics from the first three annual meetings and adding new ideas, the Committee on Arrangements has adopted basic plans which should make this year's Conference most interesting to the rural people of Michigan.

Chosen as a new feature this year will be the presentation of actual "Case Studies" in the accomplishment of Community Health projects. Following the general theme, "Here's What We Did" and "This is How We Accomplished The Project," key townspeople from various areas of Michigan will appear on the program and give first-hand information on how this project was planned and accomplished.

More than forty local health programs were suggested by various Michigan Communities in response to a questionnaire sent out by the Michigan Health Council. Selected by the Arrangements Committee as the five to be presented on the the program are:
(1) A Community Health Center—Chesaning, Michigan, area, (2) Community Enrollment Campaign—Newago County, (3) Community Health Council Organization project—Jackson County, (4) Home Safety project—Kalamazoo, Michigan, (5) Community Sanitation—Ingham-Washtenaw and Houghton Lake areas.

Plans are being made to bring prominent speakers to Michigan for the meeting again this year. The program will follow last year's plan with only two or possibly three scheduled speakers, the major portion of the time being given to presentation of the "Case Studies" and to group discussion.

Introduced at last year's Conference, The Farm Theater will be repeated this year. Current health films gathered from all parts of the country will be featured in this part of the program.

An open period will be provided on the program Friday morning for ancillary meetings and meeting rooms will be available for any co-sponsoring groups desiring to utilize this opportunity.

Another innovation this year will be the provision of ample exhibit space for health organizations. This space will be offered first to co-sponsors of the Conference and then to other worthy health organizations.

With H. B. Zemmer, M.D., Lapeer, and H. W. Brenneman, Lansing, as advisors, those working actively on the planning committee this year are:

(Continued on Page 934)

The Farm Theater

the probability of thrombi . . .

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American Medical Association Meeting-1950

The American Medical Association always brings together numerous preliminary meetings of an administrative and socio-economic nature, as well as many medical scientific groups. This year was no exception. The meeting at San Francisco had an attendance including doctors, their families, exhibitors, and others, which taxed the capacity of the city. It was freely commented upon that this annual meeting is getting so big that only four places in the United States can accommodate it. There were also many comments to the effect that the numerous scientific meetings outside of the A.M.A. organization detract much from the main program. They bring the outstanding specialists to this meeting several days earlier and many of them go back home before the A.M.A. meetings begin.

On Sunday June 25, the Seventh National Conference of County Medical Society Officers was held in the Palace Hotel at 9:00 A.M. This is not the Seventh year for there have been two meetings each year, one at the annual session and one at the interim session. After the address of welcome from the Board of Trustees, the first order of business was, "What Do You Know for Sure?" a true and false questionnaire on socialized medicine conducted by L. Fernald Foster, M.D., Secretary, Michigan State Medical Society. After that session, each person was asked to fill out the questionnaire and all were graded later.

There were three panel discussions: (1) Fred A. Humphrey, M.D., Fort Collins, Colorado, and Blair Holcomb, M.D., Portland, Oregon, "How to Organize a Community Health Council." (2) Mr. Joseph Donovan, Executive Secretary, Santa Clara County Medical Society, San Jose, Calif., "Providing Special Benefits Through County Medical Society Membership." (3) Mr. Frederic W. Fagler, Executive Secretary, Allegheny County Medical Society, Pittsburgh, Penna., "How to Set Up a County Medical Society Record System." This whole program was very interesting and instructive.

That afternoon the Conference of Presidents and Other Officers of State Medical Associations held their sixth annual meeting. Julian P. Price, M.D., Editor of the *South Carolina Association Journal* talked on "Medicine's Greatest Gift," stressing services to our patients and public.

A. Grant Clarke, of New York City, N. Y., President, Medical Exhibitors Association, gave an interesting talk in which he stressed the idea that more good is accomplished if the exhibits are at the same place where the scientific programs are held. That was not true in San Francisco.

Harry Becker, of Detroit, Michigan, Director, Social Security Department, United Automobile-Aircraft-Agricultural Implement Workers of America, CIO, presented an exhaustive paper "Labor Looks at the Problems of Prepaid Medical Care." He criticized the American Medical Association for not supporting the medically sponsored voluntary plans, but spreading its support to all insurance plans. He told the shortcomings of all insurance plans, and insisted our Blue Cross-Blue Shield plans have not met the desires of labor, but admitted they have come a long way in that direction. Then he presented labor's idea of compulsory health insurance by government which he thinks might have to come ultimately. In response to a direct question he admitted this might be socialism.

H. E. Slusher, of Jefferson City, Missouri, President, Missouri Farm Bureau, talked upon the subject "Better Health for Rural People," thinking it is in the process of being obtained, but can only be done by supplying latest type of health facilities for the Doctors to use.

Baird H. Markham, of New York City, N. Y., Director, American Petroleum Industries Committee of the American Petroleum Institute, talked about "American Democracy on Trial," and gave a very inspiring talk of the true democratic principle in counter distinction to paternal government. He stressed the advantage of private industry and private enterprise.

The House of Delegates had a complete representation from the Michigan delegates who attended sessions religiously, and took an active part in the meeting. There was very little controversial material. The most important being the so-called Hess report, dealing with problems with medical and public relations, and the activities of hospitals and medical practice, and making some suggestions for remedies. This report has held over since the previous meeting of the House and had some modifications in order to clarify legal points and was

(Continued on Page 910)

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Cancer Comment

TRAUMA AND CANCER

The importance of acute trauma as a cause of cancer has long been held by the public. Many of the older medical texts print the statement as an accepted fact and a significant number of physicians still lean to the theory. As information about the causes of cancer increases, doubts arise of the ability of a single trauma, though severe, to cause a malignant growth at the point of injury. Some of the arguments against acute trauma as a carcinogenic agent are offered, not as conclusive evidence but as incentives to further study of this controversial problem with its many medical, social and economic aspects. The influence of chronic or prolonged irritation, such as that resulting from chewing betel nut, from a pipestem, from long exposure to x-rays and ultraviolet light in sunshine, are not considered in this discussion.

Throughout his life, every human being suffers a variety of injuries by automobile accidents, machinery, falls and other means, some of which severely traumatize both bone and soft tissues. The number of malignant growths arising in these traumatized areas has never impressed itself upon the minds of clinicians or others investigating the etiology of cancer. Fractures, often compound and comminuted, are of frequent occurrence, yet no emphasis is given them as a cause of bone cancer.

Extraction of teeth probably is the most common trauma to human tissues, but the occurrence of cancer as a result of this procedure has never been established. Not infrequently the presence of an unrecognized sarcoma has necessitated a tooth extraction followed by the recognition of the pre-existing malignancy.

Healing of wounds due to surgical operations, many of which acutely traumatize skin and other tissues, is not followed by cancer.

Injury to bone is thought by some to result in sarcoma but the number of cases where the relationship is even remotely established is so few compared to the number of such injuries that the question remains unresolved, even from the statistical standpoint.

Cancer sometimes develops in old burn scars following acute injury to such tissue. In many of these cases the scar has been subjected to repeated slight injury over a long period and the question arises as to whether the chronic irritation may not already have conditioned the scar tissue to cancer and the acute trauma be only an accessory causative factor.

Breast tissue is easily and frequently traumatized and in the lay mind injuries are often associated with cancer in this tissue. Pathologists report that the earlier in its development a breast cancer is seen, the less evidence there is of any injury to the surrounding tissues.

A careful survey of the subjects comprised in the 242 cancer research projects currently carried on by the National Research Council discloses none dealing with trauma as a causative agent in cancer. Evidently the question did not appeal to the Council as one meriting further investigation.

Very few case histories contain worth-while information on the relation of trauma to cancerous growths even when the patient gives a history of such injury. This question often assumes paramount importance when compensation is claimed for injury. The patient's statement frequently is colored to influence the decision in his behalf and is unsupported by any acceptable scientific or legal evidence.

The late James Ewing, M.D. (in Neoplastic Diseases, page 108) lists the legal requirements for proof of trauma as a cause of cancer as follows:

> Authenticity and adequacy of trauma.
> Previous integrity of wounded part.
> A reasonable time relation, from three weeks to three years or more, in certain cases.
> Continuity of symptoms with those of the tumor.
> Microscopical or other proof of the existence and histological type of a tumor.
> Location of tumor at point of injury.

The difficulty of fulfilling all the above criteria in establishing relationship between trauma and cancer formation is evident. The question hardest to prove or disprove is whether or not the cancer was already established at the point of injury and was stimulated to more rapid growth by this injury. Much additional study and research must be given to this question before a scientifically acceptable

(Continued on Page 947)

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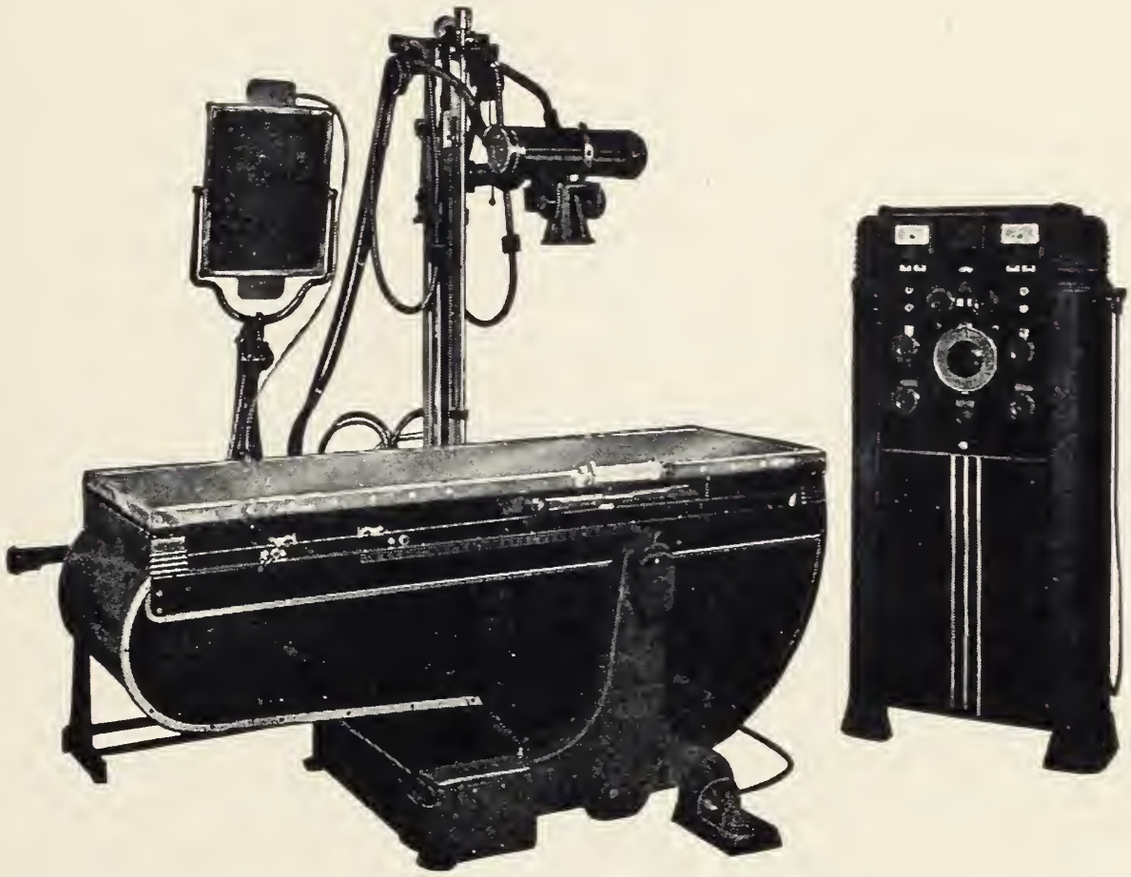

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The Blue Shield Medical Care Plans

Early Developments

Probably the first medical care plan that can be described as a community enterprise was initiated at the turn of the century in Tampa, Florida. This was the Centro Espanol de Tampa, and it is still in existence. It was organized as a society not only to provide medical and hospital care but also for general welfare purposes. In addition to subscription dues, the society derives income from its social activities. It owns and operates its own hospital facilities. Medical care is provided by a panel of salaried doctors.

As the century progressed, other medical care plans came into existence, particularly in the Pacific Northwest. Competitive situations developed, leading to certain abuses, and (as early as 1917 in the state of Washington) the county medical societies began to take a hand, by the formation of "county medical service bureaus." The bureaus contracted with employers for medical care of their employes, and the latter had free choice among all participating physicians. These bureaus came into being chiefly in the 1930's. They gradually won general acceptance and there are now about twenty-two county medical service bureaus operating in the state of Washington. In Oregon most of the county bureaus have been merged into a state-wide organization; a few still function independently.

The first statewide medical care prepayment plan was California Physicians Service, established by the California Medical Association in 1939. Complete physician's service was offered at a subscription rate of $1.70 per month. There was also a more limited contract available. Enrollment was limited to employed persons earning less than $3,000 per year. Physicians were reimbursed on a "unit" basis, the unit having a par value of $2.50 (the fee for an office visit), with other services being valued at multiples of this unit. Experience in the early years, however, was unfavorable, as demand for services far exceeded expectations, and the effect was to devalue the unit. So, beginning in 1941, all contracts were modified. This resulted in much more favorable experience, and the unit value now approximates par.

Role of the American Medical Association

In 1934 the House of Delegates of the American Medical Association adopted a set of ten principles for the guidance of medical and service prepayment plans. Some of the more important of these principles were:

All features of medical service should be under the control of the medical profession.

No third party must be permitted to come between the patient and his physician in any medical relation.

The patient must have absolute freedom to choose any participating physician.

The confidential nature of the patient-physician relationship must be preserved.

Medical service should be paid for by the patient in accordance with his income status and in a manner that is mutually satisfactory.

In 1938 a resolution was adopted endorsing "the principle that in any plan or arrangement for the provision of medical services, the benefits shall be paid in cash directly to the individual member."

During the next few years, a number of state medical societies developed their own voluntary prepayment plans. Service benefits were usually offered to subscribers within certain income limits; benefits in terms of indemnity were also offered. Recognizing the virtues of the service benefit principle, the A.M.A. House of Delegates in 1942 approved "that principle of medical service plans on a service basis when sponsored by a constituent state medical association or a component county medical society in accordance with the recommendations relating to medical service plans adopted by the House of Delegates."

In the following year the A.M.A. established a Council on Medical Service and Public Relations. Its functions were: to serve as a clearing house for information regarding adequate rendition of medical care to the American people; to study and suggest means for the distribution of medical service to the public consistent with the principles adopted by the House of Delegates; to assist the state and county medical societies in their activities with relation to medical service.

(Continued on Page 904)

AUREOMYCIN

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During the past year, obstetricians have become increasingly impressed with the ability of aureomycin to prevent or arrest infections of the puerperium. Where infection is feared, or has appeared, this broadly effective antibiotic is highly useful. Drug fastness and allergy are very rare following aureomycin. It is believed that this new crystalline form of aureomycin obviates nearly all side reactions.

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(Continued from Page 902)

The Council formulated a preliminary set of "Standards of Acceptance for Medical Care Plans." Plans which meet these standards are granted the privilege of using the "seal of acceptance" of the Council on Medical Service. Some of the standards are:

Approval by the local state or county medical association.

Responsibility of the medical profession for the medical services included in the benefits.

Free choice of physician.

Maintenance of the confidential patient-physician relationship.

Maximum benefits consistent with sound financial operation.

Benefits may be in terms of either cash indemnity or service units.

Sound enrollment and administrative practices.

Acceptance of Plans by the Council is ordinarily for "a period of two years or until revoked."

In December, 1945, the House of Delegates had instructed the A.M.A. Trustees and the Council "to proceed as promptly as possible with the development of a specific national health program, with emphasis on the nationwide organization of locally administered prepayment medical plans sponsored by medical societies." In 1946, there was established a new central co-ordinating organization known as Associated Medical Care Plans, Inc., of which more later.

Medical-Surgical Plans and Blue Cross

An overwhelming majority of the enrollment in successful non-profit medical care plans has been carried on in connection with Blue Cross hospital service plan enrollment. This has been logical, since in most areas the Blue Cross plans were already established and were willing to make available their administrative experience to the medical plans. The degree of co-ordination, however, between local Blue Cross plans and their corresponding medical care plans varies considerably. The most common arrangement at present is for the two plans to have separate governing boards (and separate corporations) but to have a single executive director and administrative staff. Such an arrangement eliminates duplication of effort in enrollment and administration, and usually works out quite successfully. Another arrangement is complete integration, with one corporation, one governing board, one executive and one staff. This exists in only a few areas; its extension is hampered possibly by these factors: (1) fear on the part of both the doctors and of the hospital people that the other group wants to control such a plan; (2) the fact that in most areas the Blue Cross plan was there first, and the medical plan is often not yet sufficiently well developed to command an equal share of public acceptance; (3) the fact that a number of states require by law that medical and hospital prepayment must be provided by separate corporations.

In some areas there is partial administrative co-ordination between medical and hospital plans, with separate corporation, boards, and executive directors, but with the hospital plan performing certain (not all) administrative services for the medical plan. In such cases the medical plan reimburses the hospital plan for its staff services, usually on the basis of a percentage of income, arrived at by mutual agreement.

At present (April, 1950) sixty-seven of the ninety Blue Cross plans are co-ordinated in one way or another with companion non-profit medical-surgical plans, in thirty-seven states, the District of Columbia, Puerto Rico, and seven Canadian provinces.

Because of their more recent origin, non-profit medical care plans have not yet been able to approach the total enrollment of Blue Cross plans. However, their growth to date has been just as rapid, if not more rapid, than was that of the Blue Cross plans in their early days. Total enrollment as of December 31, 1949, in all non-profit medical care plans was 14,228,781 of which 13,299,757 were persons enrolled in medical plans co-ordinated with Blue Cross plans. A record of non-profit medical care plan growth during the last six years follows:

January 1, 1944	1,235,000
January 1, 1945	1,768,000
January 1, 1946	2,535,000
January 1, 1947	4,436,000
January 1, 1948	7,328,143
December 31, 1948	10,367,464
December 31, 1949	14,228,781

Associated Medical Care Plans (Blue Shield)

As mentioned above, Associated Medical Care Plans, Inc., was founded in 1946 under the auspices of the American Medical Association, to serve as a

(Continued on Page 906)

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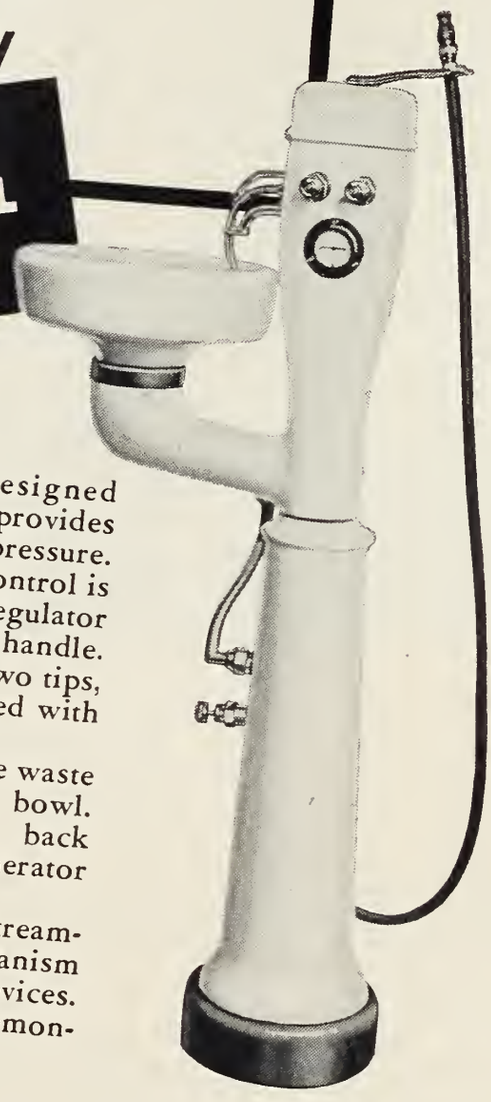

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(Continued from Page 904)

central co-ordinating agency for voluntary non-profit medical care prepayment plans. In general, its role in relation to the medical care plans is analogous to that played by the Blue Cross Commission in relation to the hospital service plans.

Associated Medical Care Plans, Inc. (unofficially known as the National Association of Blue Shield Plans) as originally organized was connected with the American Medical Association because its original constitution provided that three members of its Commission must be appointed by the A.M.A.'s Council on Medical Service. As a result of action taken by the A.M.A. House of Delegates in June, 1949, Associate Medical Care Plans was separated completely from the A.M.A. No further A.M.A. appointments were made to the Blue Shield Commission. At its own annual meeting in February, 1950, A.M.C.P. amended its Constitution to provide for eight commissioners-at-large, six of whom were to be doctors of medicine. At present there is no legal or organizational connection between the A.M.A. and A.M.C.P.

To be eligible for membership in A.M.C.P., a medical care plan must meet membership standards established by the Blue Shield Commission, must be nonprofit, and must be in actual operation. Plans organized but not yet operating are eligible for associate (non-voting) membership. The activities of the central organization are financed as are those of the Blue Cross Commission, by dues from the individual plans prorated according to each plan's enrollment.

As of December 31, 1949, there were sixty-eight Blue Shield (A.M.C.P.) plans, with a total enrollment of 12,260,055 in thirty-seven states, the District of Columbia, two territories (Hawaii and Puerto Rico), and three Canadian provinces (British Columbia, Manitoba, and New Brunswick). About half of these plans are statewide, the remainder covering smaller geographic areas. The December 31, 1949, Blue Shield enrollment represents 86.2 per cent of the 14,228,781 total enrollment in all non-profit medical care plans.

As for distribution of the income dollar, the Blue Shield Commission issued a report as of December 31, 1949, covering sixty-seven Blue Shield plans and eleven other non-profit medical plans. The combined average for all these plans was: paid in medical or surgical benefits: 79.67 per cent; administrative expenses: 13.32 per cent; added to reserves: 7.01 per cent.

Blue Shield Benefits

Under a straight service-benefit contract, the subscriber is entitled to such surgical (or medical) services as are included in the contract and as he may require, and he receives no bill from the physician. The physician accepts from the plan, as full payment, the fees for various operative or other procedures as established under his contract with the plan.

Under a straight indemnity contract, the subscriber receives cash or credit in predetermined amounts toward the physician's fee. The physician is free to charge the patient fees in excess of these amounts.

In point of fact, the most typical Blue Shield contract is one which is a combination of service and indemnity. That is, a subscriber whose annual income is below a certain amount (say, for instance, $3,000) receives service benefits but a subscriber with a larger income receives only specified credits towards the doctor's total bill.

The service-benefit contract is generally the most favorable one to the subscriber, since he knows he is fully protected. One practical advantage to the doctor is that prepayment serves to cut down his collection losses. However, subscription rates must be kept down to a level generally acceptable to the public, and this may mean that the plan's income per subscriber will be insufficient to reimburse the participating doctors adequately. Another problem with service benefits is that it is often both difficult and awkward for the doctor (or the patient himself at times) to determine whether the patient's income is over or under the specified limit.

An indemnity contract eliminated these difficulties for the physician, and is generally to his advantage, since it puts a floor under his charges without establishing a ceiling. It is, moreover, simpler to administer. The subscriber, however, has no definite assurance of what proportion of the doctor's fee will be covered.

As far as enrollment is concerned, a relatively small number of subscribers have straight service contracts, a considerably larger number have indemnity, and a still larger number (about one-half of the grand total) have a combination of the two. No matter what the form of contract, however,

(Continued on Page 908)

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(Continued from Page 906)

subscription rates must be adjusted from time to time to meet changing economic conditions such as the rising inflation of the past several years. A contract which may seem fair one year may become quite unfair a couple of years later.

Since surgical procedures are usually more costly than medical therapy (not only in themselves but also because they ordinarily require hospitalization of the patient), it is only natural that the medical care prepayment plans have emphasized coverage for surgeons' fees. However, there is a steadily growing tendency to include coverage for non-surgical treatment, not only in the hospital but in the office and home as well.

It is customary to list, on the subscriber's contract, a number of the most common operative procedures, with the amount covered for each operation. Obstetrical care is usually included. Surgical care contracts for the most part bear subscription rates about the same as or slightly less than corresponding Blue Cross hospital service contracts. Regarding the trend toward more and more comprehensive coverage, it might be noted that a plan will sometimes start out with a surgical contract, then offer a supplementary contract or rider to cover non-surgical physician's services, and finally combine the two into a comprehensive contract.

Blue Shield Enrollment Methods

Virtually all Blue Shield enrollment is carried on in conjunction with Blue Cross or other hospital service plans' enrollment. Usually, in fact, it is the Blue Cross staff personnel that sells Blue Shield. It is offered either to previously enrolled Blue Cross groups, or to non-enrolled groups in a combination "package" along with Blue Cross coverage. The advantages of co-ordination with Blue Cross, from the standpoint of economical and efficient administration, have already been pointed out in connection with medical care plans generally.

Payments to Physicians

Agreements between Blue Shield plans and their participating physicians are characterized by three main features. First, the doctor agrees to abide by the rules and regulations of the plan corporation. Second, when there is a service-benefit contract, the doctor agrees to accept the plan's payment as full reimbursement for his services to a subscriber. Third, in most cases he agrees to accept pro rata payments from the plan in the event the plan cannot pay the full value of the service unit or of the indemnity; in this respect the doctor guarantees or underwrites the plan, just as Blue Cross member hospitals underwrite the Blue Cross plans.

Some plans that are on a straight indemnity basis require no guarantee on the part of the physicians; they merely pay the same indemnities to all physicians, in or out of their areas.

In the vast majority of plans, payment is made directly by the plan to the physician. Where it is not, the claim report form usually provides for assignment by the patient to the doctor.

Legal Status of Blue Shield Plans

In general, the legal status of Blue Shield plans is similar to that of Blue Cross plans. Most of them are organized either under special enabling legislation or under the general laws. The first legislation authorizing medical care prepayment by nonprofit plans was passed in several states in 1939. Similar legislation has since been passed in a number of other states, in several of which the law permits one plan to issue both hospital and medical service contracts.

In most states the medical plans, as well as the Blue Cross plans, are subject to supervision by the Insurance Commissioner. The degree or extent of such supervision varies greatly among the states.

Where the law permits a combined medical and hospital care plan, the provisions of the enabling legislation are substantially the same as those already described in connection with Blue Cross plans. Where the law provides for separate medical care plans, the provisions follow the pattern of the hospital service plan law of the same state, except for sections dealing specifically with medical service. With a few exceptions, the medical plans are exempt from state and local taxation.

Control of Medical Care Plans

Where hospital and medical service prepayment is offered by a single corporation, the personnel of the board of directors, or trustees, is usually divided equally between the medical profession, hospital representatives, and the general public. In the more numerous cases where the medical care plan is a separate corporation, the doctors

(Continued on Page 1005)

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Editorial Comment

WELCOME, DOCTORS

The people of the Copper Country gladly welcome You. They have set aside several days to bestow on you this special honor so rightfully deserved.

After reading an outline of the program, it is apparent that this 52nd annual session of the Upper Peninsula Medical Society will bring many noted members of the profession to the district. The convention committee is to be congratulated on arranging such a worthwhile program.

The *Gazette* feels a kindred spirit towards the Medical society and wishes to congratulate its members for organizing a "good citizens campaign" among its personnel.

This program is aimed at "getting out the vote" at the 1950 November election—specifically getting out the vote to defeat any candidate, regardless of party, who favors socialized medicine.

To bring the message of voluntary medicine to the American people, the A.M.A. recently engaged Clem Whitaker to serve as its director of a nationwide program. Mr. Whitaker appeared recently before newspaper editors in Chicago at a conference sponsored by the National Editorial association.

"The American press, in its vigilant crusade to prevent Government seizure of unwarranted power over the people, has been the Nation's strongest defense against State Socialism," Whitaker declared.

"The citizens of our country will be a captive people, held captive by their own Government, within another five years, if the trend toward concentration of power in Washington is not halted.

"The American people must be aroused to come to their own defense; they must be told the blunt truth—that a Welfare State is a slave state—and that the cancerous growth of Government dependency is the most dangerous sickness of our world today.

"American doctors have become the second greatest force in the Nation, second only to the American press, in alerting the people to the danger of a Socialized State.

"The doctors are mobilizing all over this country not only to protect their profession and the public health from the scourge of socialized medicine, but to fight for the right of every American to practice his own trade or profession as a free man in a free country."

Rest assured, the *Gazette* welcomes the Medical society as a worthy ally in this fight to help prevent the chaotic conditions now prevalent in England from being repeated here. We feel confident that the American Medical Association and the American press together can present the unadulterated truth in such a manner that the grossly exaggerated benefits of socialized medicine in all their hypocritical aspects will be exposed in their true nakedness.—Editorial, *The Daily Mining Gazette,* Houghton, Michigan, June 23, 1950.

Vote November 7!

AMERICAN MEDICAL ASSOCIATION MEETING

(Continued from Page 898)

further modified for the House of Delegates for adaptation.

The house authorized the distribution of *The Journal* to all members paying the $25.00 dues, and set the dues for the coming year at $25.00. The question of fellowship was left for further study and recommendation from the judicial council.

John W. Cline, M.D., of San Francisco, was made President-elect. He has been very active in national medical affairs for several years. R. B. Robbins, M.D., of Camden, Arkansas, was made Vice President. Leonard Larson, M.D., of Bismarck, North Dakota, and Thomas P. Murdock of Meriden, Connecticut, were elected to the Board of Trustees. Other officers were re-elected.

Over 300 papers were presented. There were 157 remarkably interesting scientific exhibits. There were 1,492 authors and participants in the program. The President's inaugural address was broadcast over a national radio hook-up.

The interim meeting or clinical session for 1950 was changed from Denver, Colorado, to Cleveland, Ohio, December 5 to December 8.

Evarts A. Graham, M.D., formerly Professor of Surgery, Washington University, Saint Louis, Missouri, was given the Distinguished Service Medal.

The JOURNAL
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The Manipulative Treatment of Low Back Pain

By Howard J. Schaubel, A.B., M.D.
Grand Rapids, Michigan

MUCH INTEREST has been shown recently in the surgical treatment of low back pain. This interest has been stimulated partly by the ruptured intervertebral disc syndrome and partly by the more universal acceptance and use of the oblique lumbo-sacral roentgenogram to reveal defects in the pars interarticularis. Even though forward strides have been made in the surgical treatment of low back pain, little has been offered concerning its conservative care.

Many patients with disabling low back pain are seen daily, not only by the orthopedic surgeon but by men in all branches of medicine. A great number of these patients present no detectable cause for their complaint despite a thorough examination and x-ray evaluation. The treatment of this patient is empirical and disappointing. Both patient and physician become exhausted, and the patient often drifts into the care of non-medical practitioners.

The principles of the conservative treatment of low backache should include more than rest, heat, braces and massage. An attempt should be made to understand the pathology in the many cases of low backache wherein the x-rays and physical examination throw no light on the cause. All joints, whether deeply or superficially situated in the body, are susceptible to similar kinds of trauma, and will react alike to injury as well as to treatment. Low back pain of indifferent or indeterminate character should be thought of as an interarticular joint and adjacent soft parts injury, and treated according to the accepted methods used in the care of extremity joint sprains, strains, and dislocations.

The work of Pitkin,[4] Bankart,[1] Jostes,[3] and Travell and Travell[6] brought to my attention a manipulative method of treatment for backache in which the routine anteroposterior, lateral, and oblique x-rays reveal a relatively normal spine. Continued study and the use of manipulation in the treatment of back pain have led to variations in technique.

The object of manipulation of a joint is to carry it through the greatest range of movement of which it is physiologically capable in all directions without resistance or assistance of the muscles which act upon it. The technique of manipulation will depend on several factors, the main movements aimed at being based on the normal range of the joint to be manipulated. The manipulation should be carefully designed and executed, and never be haphazard; it is based on gentle handling of joint structures, and is in no sense a motion of brute force.

In my hands, spinal manipulation has proved a valuable means of treatment for acute and chronic backache due to either a clinical picture suggestive of a protruded intervertebral disc or to conditions where clinical and laboratory study show no organic cause as a factor in the pain. Where there is demonstrable pathology other than muscle spasm or the clinical picture suggesting a possible protruded intervertebral disc, manipulation is neither performed nor advised.

It is essential in all joints to have free movements of one part over another. The type of case amenable to manipulative treatment is that in which the main pathologic cause is interference of joint movements by subluxation, the presence of

adhesions, or by muscle spasm. An acute injury to the low back will very likely tear muscle, connective tissue, and joint capsule concomitant with certain degrees of subluxation of the interarticular

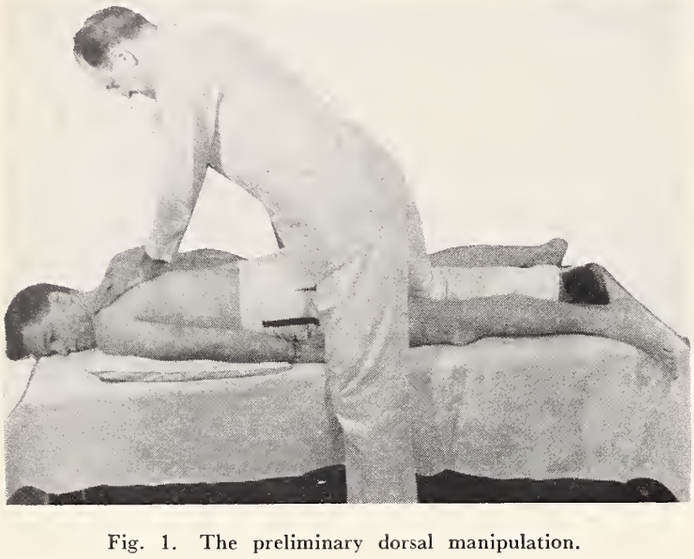

Fig. 1. The preliminary dorsal manipulation.

joints. The accepted treatment of severe sprains, strains, and dislocations is restoration of the joint space and rest in functional position, the initial application of cold and later heat together with physical therapy to accelerate the healing phase and functional return. A sprain, strain, or subluxation of a deeper joint likewise should be treated by realignment of the joint and the adjacent soft tissues. In this manner a physiologic relation of the region will be restored, the injured tissues correctly approximated and the groundwork thus laid for rapid and correct healing and recovery.

In the patient with chronic low back pain whose pathologic background is indefinite, we most likely are dealing with malunion of previously damaged soft tissues with a possible chronic fixed subluxation of an interarticular joint or joints. This condition is usually brought on if the back has been kept unduly at rest without previous re-alignment of the damaged displaced tissues. With this the formation of adhesions about the joints limit intervertebral and interarticular joint excursion. The adhesions may be intra-articular or extra-articular, and both may be present in the same joint. Extra-articular adhesions occur in the muscles, the fascia, and in the delicate areolar tissue filling up all the many spaces between and in the different structures of a joint.

Because of the restricted use of manipulation in the treatment of backache, the differential diagnosis of low back conditions becomes of utmost importance. The patient's history should be detailed, and this should include the usual accurate past history and regional survey of systems. The physical examination should be general with the purpose of ruling out definite organic pathology and should include an intricate examination of the back. X-ray should be obtained to climax the physician's final opinion, and all frank pathological lesions of the back should be excluded. Patients with backache should seldom be manipulated until they have been fully investigated and adequately examined and the general condition is found satisfactory. In this manner such definite contraindications as pathology elsewhere than in the back, or tuberculous spondylitis, neoplasms, arthritis, et cetera, are avoided. Patients with poor cardiac reserve constitute a definite risk and in my opinion should not be manipulated.

The manipulation is carried out with the patient lying on a lightly padded table which is about knee high to the surgeon. This table height allows for easy manipulation and handling of the patient without strain on the manipulator. No anesthetic is used. The patient is completely unclothed in order to insure satisfactory purchase of the surgeon's hands to the subject's body. The patient is instructed to lie prone on the table with both arms adducted to the sides of the body; this allows relaxation of the paravertebral muscles. A small pillow is placed under the patient's upper chest, allowing the chin to project over the upper edge. The patient's head may be turned to either side. The physician then abducts the patient's legs slightly and places his flexed right knee between the legs of the patient, thus assuming a partial straddle position over the patient's back with his left foot on the floor. Beginning in the high dorsal region, a deep kneading massage is begun on either side of the spinous processes. This is carried down into the lumbosacral region. When the patient begins to relax, the preliminary dorsal manipulation can be carried out. The dorsal spine must be manipulated first so that the area is completely relaxed for the subsequent climaxing low back manipulation. During the final low back manipulation the dorsal vertebrae must be locked, and they can be firmly locked only if any small adhesions and muscle spasm in the thoracic region have been discarded. The dorsal spine is manipulated as follows: the hands of the surgeon are placed on either side of the spinous processes with each heel about 2 inches lateral to the spinous process-

Fig. 2. Patient positioned for lumbosacral manipulation. Note patient's toes hooked behind his left knee. At foot of table mirrored image shows surgeon's knee fixed on patient's flexed right knee.

Fig. 3. The right lumbosacral manipulation.

es, and the fingers pointed forward and laterally. The physician's body weight is then brought forward over the hands with both elbows in extension (Fig. 1); this brings the dorsal interarticular joints into a position of mild tension. A short thrust forward is then carried out, driving the hands upward in the direction of the patient's head—the thrust must be in this direction because the superior articulating facet faces outward and backward and the inferior facet inward and forward. Frequently a snapping sound will be heard during this maneuver. The hands are then moved caudalward by degrees, and the entire dorsal spine manipulated.

The patient's legs are measured and a determination of pelvic tilt is made. If the legs are equal in length, but the low back pain is more severe on one side than on the other, the patient is placed on the painful side, and that side is manipulated last. If the low back discomfort is not localized to one side or the other, the manipulation sequence is left to the surgeon's discretion. Occasionally we find one side of the pelvis drawn upward by unilateral vertebral muscle spasm—a secondary, transitory, apparent shortening of the leg is the result, and, when found, determines the course of the low back manipulation. When one leg is found shorter than the other, with the pelvis high on the side of the short leg, that side should be manipulated last. Thus if the left leg is found short with the left pelvic crest high in relation to the right, the patient is taken from the prone position and placed on his left side; the left leg is extended, and the right knee and hip are flexed with the knee off the side of the table and the right forefoot and toes locked in the posterior left knee. The surgeon stands facing his patient and arranges the position. The patient's right hand is placed on the right shoulder and the left hand is grasped by the surgeon and pulled gently forward (Fig. 2); this rotates the right shoulder posteriorly. During this maneuver the physician places his flexed left knee lightly on the patient's right knee holding the patient in position. The patient's left hand is then placed on the right shoulder. The manipulator then gently pushes the right shoulder posteriorly, preventing the low back and pelvis from rotating by holding his flexed left knee on the patient's right knee. When the shoulder is at the extreme posterior position, the dorsal vertebrae are locked and this position is held. Then with the physician's left hand on the patient's right ilium a sudden, short, downward, and forward thrust is executed (Fig. 3); this often produces a snapping sound. The maneuver tends to separate the right sacroiliac joint, stretches the right iliolumbar ligament, and causes a separation of all the right lumbar interarticular joints. If no snapping sound is heard during the maneuver, then a secondary manipulation is attempted as follows: the patient is kept in the same position with the exception that the right knee is straightened and, with the right hip flexed, is dropped forward off the table. The surgeon straddles this leg with his left leg, and again holding the right shoulder back, he thrusts downward and forward on the right ilium (Figs. 4 and 5). Whether or not a

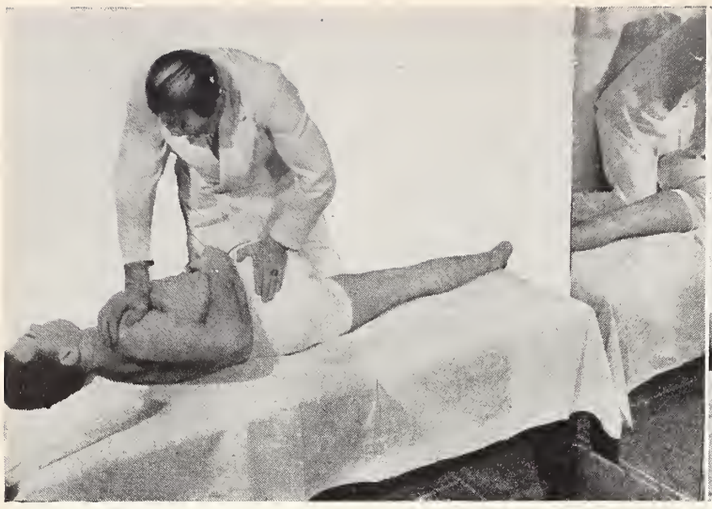

Fig. 4. The secondary right lumbosacral manipulation.

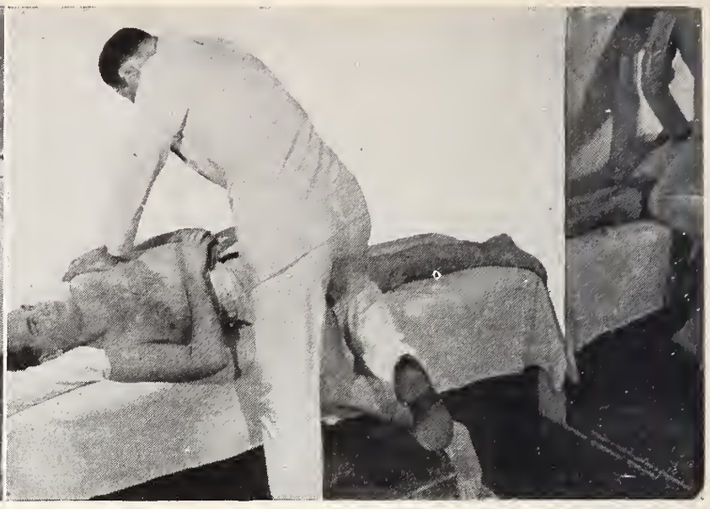

Fig. 5. The secondary left lumbosacral manipulation. Note patient's leg hanging off table.

snapping sound is heard the patient's position is reversed, and the left side is manipulated in like manner.

Following the manipulation, the low back is immobilized with adhesive[5] or a support, and the patient allowed restricted activity. The manipulation may be repeated once or twice daily as the case requires, and should be used in conjunction with the other methods used in the treatment and care of low back pain.

Finder[2] in his recent paper states, "The acceptance of manipulative therapy by the medical profession as a whole has been discouragingly slow. The reasons for this indifference or reluctance to accept manipulation as a facet of medicine may be traced to several sources. First, the profession is generally unaware of the scope, indications and therapeutic value of manipulation. Second, the medical school curriculum either is inadequate or is wholly lacking in informative instructional courses in this field. Finally, the unfortunate association between manipulation and those cults which have exploited it as a complete system of therapy has prejudiced physicians against its practice.

"The time has come for the medical profession to recognize the therapeutic value of manipulation and to adopt it as an integral part of the armamentarium of the practicing physician. As with any other therapeutic agent, the diagnosis must be correct and the indication for its use be confirmed before it is prescribed. Manipulation finds its greatest usefulness in treatment of certain forms of arthritis (hypertrophic, rheumatoid, and traumatic arthritis) as they affect specific parts of the body; in some types of subluxation; and in low back disorders. Included are such conditions as fibrous ankylosis of various joints; the cervical disk syndrome; the slipped disk of the lumbar spine; subluxation of the coccyx; and fibrositis of the shoulder (frozen shoulder)."

Travell and Travell[6] in speaking of their technique of manipulation state "the dramatic relief of pain and disability sometimes secured warrant a more extensive application of this therapeutic procedure early in the course of low back pain of obscure origin."

In my experience a few cases have responded with immediate relief of pain; however, in general, an attack of acute low back pain will be relieved in from two to five days; the chronic backache will frequently respond satisfactorily in ten days to three weeks. A patient with the picture of a protruded intervertebral disc should be given a thorough trial of conservative therapy before surgical interference is suggested. It is my opinion that manipulation should be used in such a conservative program along with rest, traction, bed positioning, cold, heat, massage, procaine, vitamins, antispasmodics, braces, and plaster casts. These modalities are sound methods of treatment for the disc syndrome and should be used, alone or in combination.

The author has noted no ill effects following the manipulative procedure without anesthesia in over 500 patients. Spinal manipulation is not presented as a cure for all cases of low back pain; it is merely another means of attack for a difficult problem, and is not always sufficient in itself. As pointed out by Jostes,[3] "Postural defects not the immediate result of acute muscle spasm—such as

(Continued on Page 931)

Physical Medicine and Rehabilitation in the Management of Hemiplegia in the Adult

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MODERN MEDICAL and surgical advances coupled with extensive wartime experience in physical medicine and rehabilitation have changed the forlorn outlook on hemiplegia, one of the common symptom-complexes of our aging population. With current advances in the control of infectious and vascular complications and with improved neurosurgical techniques, we now find that, having survived the acute episode, most hemiplegic patients can be restored to a semblance of normality. Early, comprehensive management must be instituted to prevent the complications and deformities often encountered. Contrary to general opinion, a carefully graded regimen of physical therapy incurs little risk and yields great benefits to this group of handicapped persons, now estimated to number about 1,000,000 in the United States. With the use of modern methods of rehabilitation it has been found that a vast majority can regain their ability to walk within a few months and to care for their personal needs.[5,21] Thus, they can remain with their families rather than require prolonged residency and nursing care in convalescent homes.

Present trends in longevity indicate that we may expect further increases in these and related types of chronically handicapped persons. In 1940 approximately 25 per cent of our population was over forty-five years of age and required one-half of all medical services rendered. It is estimated that about 40 per cent of the population will be over forty-five by 1980, and require much more than half of all available medical services. The average length of life has increased from forty-nine years in 1900 to sixty-seven years in 1949, and is expected to continue this trend in the United States.

Fortunately, present changes in hospital organization reveal increasing facilities and trained personnel for treatment of these patients whose rehabilitation requires physical therapy, occupational therapy, and, at times, speech therapy.[2,6,27]

State Vocational Rehabilitation Services provide funds for medical treatment and for vocational training leading to gainful employment for many of the younger victims of hemiplegia. Other public and private organizations now add their support to these chronically disabled members of our society, just as the National Foundation for Infantile Paralysis has been instrumental in advancing the cause of a younger group of citizens.

The most important service, however, is that rendered by the general practitioner who initiates the measures which prevent death at the onset and who later supervises and encourages the patient's course of physical retraining, using all available facilities of the hospital and the community.

Acute Stage

The acute stage in the management is directed to saving the patient's life, determining and correcting the etiologic mechanisms, providing skilled nursing care, and preventing physical and mental complications. Its duration varies from as little as twenty-four hours in some embolic, thrombotic, or vasospastic states to several weeks in hemorrhagic cases. The determination of the pathogenesis is based on the history, physical, laboratory, x-ray, and spinal fluid examinations. The chief categories are: (1) traumatic, (2) inflammatory, (3) infectious, (4) neoplastic, and, most commonly, (5) cardiovascular. Congenital etiology, multiple sclerosis, parkinsonism, and hysteria account for other groups of lesser frequency. Vascular causes may be (1) thrombotic (febrile, senile, luetic, or hematologic), (2) embolic (cardiac), and (3) hemorrhagic (hypertension, aneurysm, trauma).

Recent advances[1] in cerebral arteriography, electro-encephalography, and encephalography aid in more accurate localization and enable aspiration of small hemorrhages through bone openings. Stellate ganglion blocks with procaine are of value in vasospastic, embolic, and in some thrombotic states. The use of nicotinic acid, CO_2-O_2 mixtures, other vasodilators, and anticoagulants is helpful in improving cerebral circulation. Basic disturbances such as cardiac, hematologic, renal,

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diabetic, et cetera, require concomitant correction and prolonged supervision, for the physical restoration is only as sound as the medical foundation on which it is based.

Nursing care must be directed to maintaining proper posture and alignment in bed as well as to vital functions and comfort. Care must be exercised to avoid fixation of the limbs as they become increasingly spastic following the initial stage of flaccidity which may persist for a period of a few hours to several weeks. During the flaccid period, pillows, sand bags, foot boards, metal and plaster of paris splints are effective in maintaining the joints in neutral position and in preventing painful capsular and muscular contractures. The most common deformities requiring prevention or correction are external rotation at the paralyzed hip, flexion at the knee, and "drop foot." In the upper limb there is usually adduction at the shoulder, flexion of the elbow and wrist and a closed hand with the fingers covering the thumb. The importance of these early measures is evident especially in preventing a painful shoulder, a useless hand, and an unstable, clumsy foot. The special nursing procedures for care of the skin, bowels, bladder, nutrition, and sleep are discussed elsewhere.[25]

During the acute stage, physical therapy may be given prophylactieally according to the patient's tolerance. It is advisable to begin active physical procedures within the first week, if possible, to prevent the deteriorating effects of prolonged recumbency, viz, impaired vasomotor and neuromuscular function, cardiac enlargement and weakness, nitrogen loss, calcium loss with the danger of kidney stone formation, visceral hypotonia, muscular atrophy, psychological regression and dependency, neurotic maladjustment, et cetera. Mild heat, stroking massage, and passive exercise will decrease the pain and swelling of the extremities, prevent the onset of contractures, maintain an awareness of residual proprioceptive and motor functions, and ameliorate the spasticity. Simple types of muscle exercises can be initiated even before the patient sits and should be done before spasticity develops. It is necessary to instruct the patient in self-assisted motions of the involved limbs with the aid of the sound limbs and in pulley exercises to be done in bed, thus enabling complete range of motion at the affected joints. It is important that too strenuous massage and passive motion be avoided during flaccidity inasmuch as the traumatic effects may retard recovery. Also, care in handling the flaccid limbs will prevent possible fractures and dislocations.

As soon as the patient becomes conscious, afebrile, and the initiating mechanisms approach an equilibrium, he can sit for increasing periods, followed by standing and assisted ambulation in parallel bars, either in his room or in the department of physical medicine and rehabilitation. The aid of an arm sling and convalescent walkers are of some value early, but their use should be discouraged in favor of a more dynamic program of activity which is more likely to lead to physical independence. The increasing spasticity at this time requires reassurance of the patient and his family and guidance in outlining his future program. Emphasis is placed on his increasing abilities and improvements rather than on his residual impairment. Unfortunately, it is at this stage that most patients are bundled into a wheelchair and dismissed to their families or to institutions which are already crowded with semi-disabled patients.

It is no more justifiable to commit the hemiplegic person to a life of invalidism than it is to send the patient recovered from a coronary emergency to the old folks' home or to dismiss the acutely psychotic or cancerous individual to his family. The progress made in the latter conditions by rational, well-established procedures is now being duplicated in progressive hospitals which provide the means and mileau for the rehabilitation of the chronic neuromuscular disorders. Increased interest and participation of the general practitioner and specialist is necessary for the optimal recovery of these patients, for rehabilitation implies an integrated program of treatment beginning at the acute onset and ending in restoration of the patient to productive or maximal self-sufficiency. The rapid, economical achievement of these goals requires close co-operation among all those involved: family physician, specialist, hospital personnel, and public and private agencies.

Subacute and Chronic Stages

In the subacute stage a more definitive and intensive program of activity and training can be outlined, based on the medical status of the patient, his interests, and motivation. The majority of patients can be treated on an out-patient or domiciliary basis, thus eliminating prolonged hospitalization. This phase of treatment may begin as early as one day after onset of the paralysis, and satisfactory results are usually obtained within

three months, although improvement may continue either spontaneously or, more rapidly, with continued treatment.

The spontaneous increase in spasticity soon becomes unchanging. Further recovery depends on muscle training and re-education to take full advantage of the compensatory adaptability of the nervous and musculoskeletal systems. In partial lesions of the corticospinal tracts, the substitution of function by the intact remainder is often amazing following neuromuscular re-education. Localization of function in the cortical motor areas is not as limited as generally considered. The fact that it is possible to walk after the removal of a cerebral hemisphere is evidence of widespread cortical and mid-brain adaptability and functional reorganization.[26]

This adjustment and development of reserve capacities is inherent in man and is obvious in such conditions as poliomyelitis where neuromuscular co-ordination and muscular hypertrophy are achieved, in amputees whose balance and co-ordination are enhanced, and in paraplegia where manual dexterity, strength, and trunk co-ordination are accomplished with therapeutic exercise and gait training. In all of these conditions psychic disturbances[7] require consideration. The psychological implications are important in that the patient gradually becomes more and more enthused in his improvement and increasing abilities as a result of treatment and less engrossed and maladjusted due to contemplation of residual disabilities. With the decrease in psychic tension there is a concomitant diminution of spasticity, greater physical energy and endurance, and improved emotional stability.

The essence of the management is found in the definition of rehabilitation which is the "achievement of maximal function and adjustment of the individual and preparation (physically, mentally, socially, and vocationally) for the fullest life compatible with his abilities and disabilities."[3]

Evaluation

A more complete evaluation at this time includes consideration of neurologic, psychiatric, medical, social, and vocational aspects. Localization of the lesion is often of value prognostically. For example, the triad of prolonged flaccidity, hemianesthesia and hemianopia are associated with a poor recovery.[4] Various combinations of aphasic, motor, sensory, and proprioceptive disturbances have been classified as syndromes,[32] recognition of which often enables a rational, rather than routine, program of treatment. It is often necessary to determine the type of aphasia in order to ascertain what methods the therapist can use to establish contact and understanding,[15] (i.e., verbal, written, or demonstration methods). The type of dyskinesia should be noted, whether spastic, rigid, flaccid, tremorous, or athetoid, inasmuch as the procedures in physical therapy, occupational therapy, speech therapy, drug therapy, bracing, and surgery differ according to the neuromuscular status.[8,24] Psychiatric and psychometric investigation is advisable in patients who are poorly motivated, unusually depressed, or otherwise markedly retarded in their personal and social adjustments. Occasionally, a latent tendency or subclinical state becomes an overt psychosis or severe neurosis after a "stroke." In apparently normally adjusted individuals an evaluation of the psychic state may include psychometric studies. This objective evaluation of intelligence, perception, judgment, aptitude, skills, and emotional stability is of value in predicting future goals. In hemiplegia with asphasia, psychometric tests are often predictive of the future course of training. They may reveal loss of spatial or temporal perception, impaired learning ability, faulty judgment, and other cortical disturbances. Thus, some patients are unable to learn crutch gaits due to their inability to execute repetitive motions in various planes and retain memories of these patterns of motion. Organic (thalamic) emotionality should be distinguished from psychogenic lability. The former is characterized by spontaneous outbursts of laughing or crying or severe, bizarre pain without apparent reason or causation. Medical conditions such as blood pressure, urinary status, cardiac, metabolic (diabetes, thyroid, et cetera), and musculoskeletal abnormalities should be investigated to determine the relative rate of deterioration and the feasibility of rehabilitation.

An early survey such as this will serve to prevent complications, some of which are obesity, joint contractures, convulsions, and swollen, painful limbs. Decubitus or pressure ulcers, neurotic tendencies, urinary incontinence with infection should be promptly treated in order to avoid the resultant hypertonicity.

The social evaluation should uncover the personal and family attitudes and resources toward rehabilitation, the home situation (physical and emotional), and the future problems to be met. It

is desirable that the physician take adequate time to orient the patient and his family as to his condition, discuss the future period of training, the roles of the ancillary personnel, and what may be expected. Other physicians' findings should be explained to him and his fears alleviated. In this manner early effective psychotherapy can be offered and continued by the attending physician or by the psychiatrist, if necessary. Other members of the family may require this supportive care as much as the patient. Apparently insoluble family problems can often be resolved by quiet discussion and the assistance of various organizations such as visiting nurses, physical therapists, and social service agencies. Each step in his rehabilitation should be carefully chosen so that his morale remains high as a result of repeated small achievements. The stimulus and social adjustment provided by his contact with similarly affected patients during group treatment[9] is often an outstanding milestone in recovery. It limits his introspection and raises morale and motivation. State vocational rehabilitation units provide interviews, testing of aptitudes, interests, and skills, and aid in suitable training and employment placement.

Prognosis

However, long before the vocational stage is contemplated, it is necessary to make a prognosis as to the physical recovery and restoration of function. This will rest on the previous findings: the nature, size, location of the lesion, the extent of flaccidity, severity of dysarthria or aphasia, impairment of special senses, emotional disturbances or actual psychosis, state of motivation, and associated diseases (convulsive seizures, nephritis, diabetes, syphilis, hypertension, encephalomalacia, cardiac insufficiency). The presence of contractures, excessive spasticity and other complications of prolonged bed rest and inactivity increase the difficulty and cost of recovery. The outcome is generally most favorable in thrombotic and embolic states and poor when extensive hemorrhage occurs, especially if it is repetitive. The rate of improvement is in general from proximal to distal segment of each extremity, the lower extremity becoming functional before the upper. In similar manner, the principle of ontogeny recapitulating phylogeny applies to the recovery of various muscle groups, i.e., the more primitive or gross motions are restored before the finer, recently acquired movements (wrists, fingers, dorsiflexion of foot, hip and shoulder abduction). Treatment is thus directed first to achieving gross motions of the hip and shoulder girdles and in *developing gross patterns of motion involving all joints* rather than attempting *detailed muscle re-education* as in flaccid paralysis, such as poliomyelitis.

The prognosis will be determined also by the availability of trained personnel: nurses, physical therapists, occupational therapists, speech therapists who can work harmoniously toward the ultimate recovery of the patient. In addition to their technical skills, they should be selected for their ability to understand the patient sufficiently to aid him in his discouragement, maintain his attention, stimulate his interest, and challenge his pride toward the conquest of his disabilities.

The current emphasis on the active role of the patient is in marked contrast to former practices, i.e., the empirical use of passive means, such as heat, massage, etc. In modern departments of physical medicine and rehabilitation the prescription and supervision of therapy by these co-workers is in the hands of the physiatrist.[22,23] In smaller hospitals, interested physicians co-ordinate the treatment. In general, it is advisable that one physician assume the responsibility of supervision of the long-range program in collaboration with the medical social worker who serves as a link between the physician and the patient's family and job.

Before beginning a plan of rehabilitation it is necessary to tabulate the findings relevant to the physical retraining in order to allow objective, periodic review of progress. The pertinent data include (1) manual tests of muscle strength, co-ordination, and spasticity at all joints, (2) range of motion at the joints, (3) performance tests of the normal daily activities.

Goals

On the basis of the above findings one may establish the treatment plan and probable goals, which may be progressively outlined as follows:

(1) Partial self-care, for these severely handicapped or diseased, the mentally deteriorated or apathetic. This involves primarily training in the personal activities of daily living.[11] It stresses hand and trunk functions and the use of a wheel chair without assistance. (2) Ambulation.—This goal can be achieved by about 90 per cent of all hemiplegic adults within four to eight weeks if they are treated early! Physical therapy and occupational therapy are directed primarily to the affected extremities. Suitable braces, splints, crutches, or canes are often necessary. (3) Self-sufficiency.—In addition to

the foregoing, speech therapy is necessary for this group. (4) Vocational stage.—Development of physical stamina, intellectual and emotional stability, and productive capacity round out the complete rehabilitation. Recovery to this extent may require as long as one year. In general, the time, effort, and cost are fully justified in suitable cases.

1. In those in whom partial self-care appears to be the ultimate goal due to medical or psychiatric reasons, it is imperative that a tendency toward dependency does not become established. For this reason it is often advisable to have these patients grouped in a separate ward where their supervision and guidance can be carried out by specially trained nurses. This arrangement allows the nurse to supervise and instruct the patients during their convalescence in an *unhurried* manner. The normal activities of daily life are the curriculum for this group. They are instructed in safe, efficient methods in order to achieve the maximum in personal independence such as turning in bed, sitting upright from a supine position, dressing, personal hygiene, toilet hygiene, eating, communication (e.g., left-hand writing or typing), application of necessary splints or braces, self-administration of hypodermic injections, et cetera. Special devices, modification of clothing (zippers) and shoes to permit dressing with one hand, collapsible, lightweight wheel chairs with brakes, properly modified for individual[10] use, which can be self-propelled with the intact hand, are a few of the measures used for training. The maintenance of personal dignity and freedom of the patient's family are adequate rewards for the short period of time spent in learning the skills for self-care.

2. Training the patient in ambulation involves a continuation of the early measures, namely:

(a) Balance training—first, sitting in bed, then on a chair, then standing between parallel bars, then balancing with a crutch or cane and finally independent stance with good posture.

(b) Alleviation of painful joints and contractures of the shoulders, hands, and feet by means of heat[18] (moist packs, infra-red heat, hydrotherapy, short-wave diathermy, paraffin baths), passive exercise, massage, active-assistive exercise by means of a pulley and rope arrangement whereby the intact limb moves the paretic or spastic one, active exercise with a powder board, and graded occupational therapy. Procaine iontophoresis or injection, sympatholytic drugs, ethyl chloride local anesthesia, and paravertebral sympathetic ganglion blocks are of further value in selected instances.

(c) Release of spasticity with heat, pulley exercises,[28] prolonged sinusoidal or faradic stimulation,[20] and active exercise including gait training. Muscle-relaxant drugs such as curare (intramuscularly) and Tolserol (intravenously) have a limited value as diagnostic and therapeutic aids. Oral medications for relieving dyskinesia are not generally effective except for the use of hyoscine in tremor states. Resistive exercises[12] are of value in restoring muscle strength and in many instances reduce spasticity.

(d) Muscle re-education to re-establish reciprocal innervation of agonist-antagonist muscle groups[29]: the use of various pathologic reflex mechanisms such as the tonic neck reflex,[33] synkinetic or abnormal associated movement patterns (e.g., climbing reflex of Strumpell[31] eliciting foot dorsiflexion during resisted hip flexion), bimanual and bipedal activities in physical and occupational therapy to encourage crossed learning phenomena[16] and reciprocal innervation, proper splinting (e.g., abducting the spastic thumb and thus facilitating finger extension), the use of primitive crawling patterns, relaxation exercises, co-ordination exercises in physical therapy[17] and in occupational therapy with the body in a functional position (i.e., either prone, sitting, or standing). Efforts are directed toward the excitation of spontaneous movements utilizing the primitive postural, vestibular, or midbrain reflex arcs[14] upon which functional movements are superimposed. This is achieved by means of conditioned reflex training and repetitive exercise, muscle (movement) re-education,[19] occupational therapy and gait training for the most part.

(e) Occupational therapy with bicycle jig saw, weaving loom, treadle devices, wood-working, finger painting, clay modelling, etc., as specifically prescribed to attain either increased range of motion, strength, or co-ordination of affected limbs.

(f) Gait training, in parallel bars with the use of a mirror, heel-toe gait to diminish clonus and restore normal pattern of reciprocal motion beginning with a four-point alternate gait and progressing to a gait with the assistance of one cane. The primary aim should be the prevention of faulty habit patterns (hip circumduction, et cetera) and intensive practice in a graceful, non-tiring means of locomotion. Many patients, after a short time, can continue their training at home with weekly professional supervision. It is generally helpful to use a double-upright short-leg brace, caliper or stirrup joint, with a 90° ankle stop and a T-strap to control inversion of the foot. A long-leg brace or knee cage, allowing limited excursion, is sometimes needed. Occasionally surgical correction such as selective tibial neurectomy, tenotomy, or joint fusion are indicated after therapeutic trial with more simple means such as a procaine block before neurectomy and a brace before fusion.[24] Improvement in function of the upper extremity is attained by means of a light-weight forearm cockup splint with the wrist in slight extension (15°) and the thumb abducted. Complete return of function of the hand is unusual but proper splinting (or surgery at a later date) and retraining will salvage considerable use. In general, braces should be durable, light in weight, contain minimal leather and lacing, be easy to apply with one hand and, in spastic limbs, they should not have elastic forces incorporated

in them inasmuch as the already increased stretch reflex is thus further intensified.

Psychological (cosmetic), structural, and functional requirements should be considered before routinely prescribing a brace which, in most instances, will be abandoned unless it meets the aforementioned criteria.

(g) Training in climbing stairs, ramps, street curbs, entering an automobile, and obstacles in traveling completes the gait activities.

(h) General physical reconditioning to attain stamina and endurance.

3. Self-sufficiency implies a recovery of all major functions including speech. In most instances all disabilities, including speech, may be treated concurrently with mutual benefit to all. Occasionally, it is necessary to improve speech before proceeding with other treatment. Although speech therapy is often prolonged, its recovery may facilitate other training and adjustment of the patient.

4. Vocational aptitudes are frequently discovered by psychometric tests and during the treatment of arm disabilities with occupational therapy. Further survey, training and placement in either regular, sheltered, or home employment is feasible for a majority of hemiplegics who can thus continue to support their families to some extent. Older persons gain experience in crafts and hobbies. More widespread acceptance of these and other handicapped persons by society and industry will eventually justify the measures necessary for their rehabilitation.[30]

From the above résumé it can be surmised that the essential features of management are early retraining, adequate space, proper equipment, trained personnel, regular periods of training for two to three hours daily at first and according to individual needs later. Although it is advisable to initiate the retraining program under hospital auspices, a great measure of improvement may be achieved by providing proper facilities in the physician's office or in the patient's home and by supervising the medical and social aspects of his recovery. In those with multiple disabilities, early treatment in the proximity of the patient's home is advisable to forestall complete invalidism. Many community rehabilitation centers now being modelled after the recommendations of the Baruch Committee on Physical Medicine[3] hope to provide this type of comprehensive, economical service.

Summary

The hemiplegic patient, the forgotten patient in medicine, is capable of unrealized restoration, physically, mentally, socially. Just as other chronic conditions (neoplastic, infectious, and psychiatric) have demonstrated their amenability to rational therapy, the chronic, semi-disabled, hemiplegic patient now finds means for his rehabilitation through an integrated plan of treatment involving medical, surgical, physical, psychological and vocational services.

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To pay his federal taxes, the average worker today puts in about 47 days a year—close to one day a week. If all the proposed new programs go into effect, the average worker will then have to give the pay from 67 days of work to pay federal taxes. When he does this, he is saying to the Federal Government: "Here, you take my money and buy me something with it. You know better than I do what I want."—James F. Byrnes

Occupational Therapy in Physical Medicine

By Barbara Jewett, O.T.R., and
M. K. Newman, A.B., M.D., F.A.C.P.
Detroit, Michigan

THE MODERN general hospital provides not only general medicine and surgery with nursing care but also physical medicine. Physical medicine is that form of medical treatment which deals primarily with the restoration of bodily functions.

Physical therapy, one part of physical medicine, is concerned with the injured part or closely related parts. It administers various forms of mechanical and physical aids in the form of heat, massage and exercise as stimulation for the therapeutic effect upon the involved part or parts. Progress of the part is recorded. Muscle examination determines the muscle power as a basis of treatment.

Occupational therapy is that part of physical medicine that uses selected activities, physical and mental, definitely prescribed and guided, for the purpose of contributing to and hastening recovery from disease or injury. Occupational therapy contributes to the recovery program by alleviating mental strain. It helps the individual accept his disability or illness and to adapt to it. Through acceptable activity the patient can develop or maintain good work habits and thus prevent the establishment of invalid habits. Planned activity aids in the maintenance of physical functions or in the restoration through the redevelopment of joint motion, muscle strength, or co-ordination. Graded activity improves circulation and encourages the desire to eat and sleep. By improving the posture and through graded activity, the patient will increase his resistance to fatigue.

The occupational therapist holds a unique position in the psychosomatic approach. The treatment is planned with consideration of the patient as a whole. He is an individual and not just a fractured leg, a cardiac condition, or a hemiplegia. With the demands for rehabilitation of the injured increasing, occupational therapy has broadened its scope and modified its techniques in arts and crafts, recreational and educational activities to include new prevocational, avocational and vocational pursuits.

The professional relationship between the doctor and the occupational therapist should be one of complete understanding. The doctor needs to understand what the therapist can do for his patient and how it can be accomplished. He should know the real purpose behind the occupational therapy treatment. Few doctors have had occupational therapy presented to them during their training in medical school and have had to acquire that knowledge on their own. Until recently, physicians in general practice have had little opportunity to see occupational therapy in action unless they were able to see it in service hospitals or if they were in metropolitan areas where occupational therapy is one phase in the recovery program.

The doctor prescribes the treatment, but the therapist must use ingenuity and skill in selecting an activity that will do the job or can be adapted to give the desired result. The therapist's report of the patient's progress and his reactions can help determine when changes in the treatment are necessary. The therapist will report if progress seems to be stationary, progressively worse, if there is progress with a leveling off, or if there is complete recovery. The doctor in his prescription states his purpose and objectives for the occupational therapy treatment, with definite statements as to precautions and limitations.

The physician should expect the therapist to make accurate reports of progress. The report should indicate the techniques and criteria used in the treatment, with observations as to the patient's reactions and his physical and psychologic progress. Realizing that pain produces a conscious guarding, it is necessary for the therapist in planning the mental motivation to be alert and possess insight and knowledge of how to gain the patient's confidence and to select and present the activity so that the patient will want to do it. The medical profession today recognizes the fact that during illness the mental depression of the individual and a fatalistic attitude can seriously react on his physical condition. Directed activity, which is interesting and purposeful, can focus attention away from the individual and release depression, anxiety and fear. The activity will reduce restlessness and other harmful mental attitudes.

The occupational therapist co-ordinates with other services so as to understand the problem and be better able to gain the individual's interest and

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co-operation and then watch for clinical results. The occupational therapist carefully explores the patient's abilities and interests and plans the treatment program with purposeful activities. Aptitudes, skills, work habits, and work tolerance are all factors the therapist can discover which can be correlated with a vocational rehabilitation program in helping the individual adjust to his disability.

In a general hospital the therapist will be called upon to work with patients with many different diagnoses. The doctor will have different results he desires to be accomplished with his patients which he will put into his prescription for the occupational therapy treatment. With cardiac patients the aim may be at first for passive stimulation, as listening to music, the radio, or being read to. Through this mental activity the patient can be encouraged to rest with contentment, helped to dispel fears and stimulated to a more mentally active life. This may progress with the doctor's prescription to a slight use of the hands, and to progress into such activities as stamp collecting, carving, fly-tying or other hobbies. Often activities can be planned with increasing level of activity to some activity that will have a market value, which will aid greatly in restoring the patient's confidence and raising his morale. In a hyperthyroid patient occupational therapy might plan a variety of light activities within the concentration span, to provide assurance and complete rest. In contrast the hypothyroid patient may need definite stimulation to restore normal level of participation after the removal of the thyroid gland. If the patient is in the hospital for observation, many days may elapse before treatment is really started. Occupational therapy can help in the adjustment to hospital life. In diabetic patients occupational therapy can assist by helping the patient to expend a normal amount of energy. In general surgery occupational therapy is recommended for its psychologic value. In plastic surgery such as burn cases, occupational therapy besides helping in the psychologic value assists in stimulating circulation and maintaining muscle tone and joint motion in the uninjured parts. As healing progresses, the physical therapist and occupational therapist start with passive motion, progressing to assistive motion. As active motion is used, care must be taken not to strain the new tissue. Gradually the motion is graded up to increase the muscle power and the range of motion. In the early stages of convalescence from poliomyelitis, occupational therapy can provide a psychologic release. Later it may assist in the re-education of muscles by using carefully graded activity.

Patients with physical disabilities will fall into the classification of joint limitation, muscle weakness, or in-co-ordination. In the occupational therapy treatment for physical disabilities the adequate prescription is of utmost importance. The joint motion is measured by the therapist to ascertain the degree of limitation and as a measure for determining progress. Through graded activities and adapted equipment, power or strength is developed in weak muscles possibly due to infections or prolonged immobilization. Graded stretching can be encouraged in joint disabilities caused by fractures, sprains, infections and immobilization. For cases of in-co-ordination due to causes as infections, hemorrhage, injury, cerebral concussions and skull or spine fractures, muscle re-education can be developed by a planned activities program using large muscle groups. Activities are adapted to train in accurate single joint motion and progress to combined motions. As accuracy is attained, speed is increased. For example, graded treatment for loss of power due to nerve injury in the deltoid muscle might be provided through braid weaving. If the muscle has the rating of poor, then a sling support is used to eliminate gravity. In the case of a fair muscle, vertical sanding can be done sanding downward only, which is assisted by gravity. For a fair muscle, basketry might be used, with the work placed high, involving motion against gravity. For a good muscle, vertical sanding can be used with upward sanding motion against gravity and the resistance offered against sand paper. Grading the treatment would be produced by increasing the resistance, as might be done by an elastic band around the upper arm as upward motion in sanding was executed.

In the treatment for joint limitation of motion in the wrist, flexion is forced by muscular effort combined with outside force. This may be accomplished by the use of graduated mallets which are lowered to the table as the wrist is supported. Wrist flexion can be attained by using a brayer to ink a linoleum block which is supported in a position of about a 45 degree angle. Increasing wrist hyperextension can be obtained through square knotting. The ends of the cords can be wrapped around spools or dowels which the patient will grasp, and stretching is produced by muscular effort only. Sanding with a round sand stick over a rounded surface close to the patient can be used

for increasing wrist hyperextension. Basketry may be used for stretching as the force is exerted by body weight over the basket that is placed low.

In the treatment for shoulder limitation, wheel weaving might be used, with the desired shoulder motions obtained through adjusted position of the patient at work. The winding of warp for weaving can be done on an adjustable frame which will permit shoulder motions varied by the manner in which the patient stands and moves the arm. In working for outward rotation of the shoulder and horizontal abduction, basketry placed high above shoulder level will give opportunity for repeated motion. For hyperextension and inward rotation of the shoulder, the weavers of the basket can be brought down and behind the hip. The same motions can be accomplished through square knotting by pulling the strings with both hands out to the sides at head level or down to the sides in back of the hips.

Motion of the hip, knee, and ankle can be graded by adapting the bicycle jig saw to suit the need. Raising the seat will increase the extension and decrease the flexion; likewise, lowering the seat will increase the flexion and decrease the extension. The lengthening of the pedal shaft will increase the circumference, and therefore the motion in both flexion and extension will be greater.

In working with patients with physical disabilities, they are instructed and supervised in correct motions to insure a carryover into daily life. The occupational therapist must sense the patients' fears, feel out their interests, analyze their reactions and adapt the activity and equipment to suit the individual's needs as he progresses. An important part of the rehabilitation program is the training for the physical demands of daily life such as eating, dressing, walking, being able to get about and writing. Through a testing program the patient's abilities and aptitudes are noted and can be used as helpful information in guiding for vocational rehabilitation.

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Postgraduate Course on General Medicine.—On September 21, 22, and 23, the Frank E. Bunts Institute and the Cleveland Clinic will present a continuation course for physicians on "Practical Problems in General Medicine." Dr. M. A. Blankenhorn, Professor of Medicine at University of Cincinnati, will give the evening address September 21 on "The Rickettsial Diseases." The other out-of-town guest speakers will be Dr. D. W. Pickering, who is Director of the Medical Unit, St. Mary's Hospital, London, England, and Dr. E. Braun-Menendez of Buenos Aires, Argentina, who will speak on "Pathogenic Basis of the Treatment of Hypertension."

Disruption of Vaginal Wound With Evisceration

Eighteen Months Following Vaginal Hysterectomy

By Cornelius E. Dunn, M.D., F.A.C.S.
Detroit, Michigan

ALTHOUGH much has been written on the subject of disruption of abdominal wounds with evisceration, the writer was able to find little in the literature on the subject of disruption of other wounds. I have been unable to find any other case similar to the one presented in this report. These considerations prompted me to report this unusual case, and to review the literature relating to it.

Report of Case

Mrs. H. P., No. 75273, East Side General Hospital.

Present Illness.—This forty-eight-year-old matron was seen at her home on September 17, 1949. The emergency call was made because the patient was very frightened. She complained of severe abdominal pain, and that something was coming out of her vagina. She had had a vaginal hysterectomy in February, 1948, eighteen months prior to this catastrophy. Likewise, she had been suffering with a severe cold accompanied by cough for which she had been receiving penicillin daily in the doctor's office. She stated that immediately after a coughing spell, she felt as though everything was dropping out of her vagina.

Past History and Family History.—The patient is a happily married woman with three children, aged twenty-five, fourteen and six. All of her deliveries were uneventful.

Physical Examination.—The patient is a 48-year-old matron, well nourished and well developed. Pulse 80. Blood pressure 120/80. Heart normal. Chest revealed numerous moist rales. The cough was deep and productive. Abdominal examination yielded negative results. The pelvic examination was more gratifying, i.e., a necrotic mass of tissue protruded from between the labia. This mass was found to emerge from the top of the vagina. There was no vaginal prolapse. She was sent to the East Side General Hospital and placed on medical management, with streptomycin, penicillin and sulfa, in an attempt to clear up the chest condition and prepare the patient for surgery. In the meantime, the report on the biopsy came back as "necrosing omentum." Also, the amount of omentum outside the vagina had markedly increased in size, the abdominal pain became more severe, and nausea and abdominal distention became a

factor. We felt that she was becoming obstructed and decided to operate at once.

Operation.—With the patient in stirrups and under gas-ether anesthesia, a vaginal preparation was done and a thorough examination was made. Practically all of the necrotic omentum was removed piecemeal. Intestines were encountered in the eviscerated mass. A sponge soaked in tincture of merthiolate was left in the vagina, and the patient was placed flat on the table. Gowns, gloves and drapes were changed, and a laparotomy was performed. The vaginal mass was freed from the top of the vagina and carefully pulled back into the abdomen. It was found to consist of bowel and omentum. The top of the vagina was closed with a running chromic catgut suture. The round ligaments and infundibuliform fascia which had been dissected free, were re-sutured to the top of the vagina to maintain suspension of that structure. The bladder edge was caught and sutured over the top of the vagina. There was absolutely no prolapse of the vagina.

Postoperative Course.—The postoperative condition of the patient was not good. Her cough persisted and her temperature ranged between 102 and 105 degrees. She was given a transfusion of 500 c.c. of whole blood daily, and sulfa and penicillin was given around the clock. One gram of streptomycin was given daily intramuscularly. Fluids were given by the intravenous route. The postoperative laboratory picture was as follows: Red blood count 4,120,000; hemoglobin 80 per cent. X-ray report of September 24, 1949; "Patchy areas of consolidation in right and left central area both lungs, which appear to be due to virus type broncho-pneumonia."

On the fifth postoperative day, September 27, 1949, the abdominal wound disrupted and intestines appeared beneath the dressing. She was immediately taken to the operating room, and under gas-ether anesthesia and local, the wound was completely broken down and resutured with through-and-through vertical mattress interrupted sutures.

Second Postoperative Period.—The same orders were written as those following the first surgery, except that continuous Wangensteen suction and an oxygen tent were employed. Serum protein: 5.66, previously 6.2. Albumin: 3.95. Albumin-globular ratio 2.3 to 1. Red blood count 3,860,000; hemoglobin 60 per cent; neutrophiles showed toxic granulation.

The patient's condition on the first postoperative day was greatly improved and continued to improve. On the third postoperative day, the suction was removed and the oxygen tent and antibiotics were discontinued. Two days later, the intravenous fluids and all medications were discontinued.

The patient was placed on a high protein diet and 1000 mgms. of ascorbic acid daily. One week postoperative, she was going to the bathroom and walking about the hospital. A final examination in January, 1950, revealed a thoroughly healed abdominal and vaginal wound without evidence of hernia or prolapse.

It is interesting to note in this case that the vaginal wound held up for eighteen months following the hysterectomy, with no evidence of prolapse. The virus pneumonia with its persistent cough was the factor responsible for both the vaginal and abdominal wound disruption. Cure of the pneumonia, together with the improved nutrition of the patient, resulted in complete healing of both wounds.

A brief review of the literature relating to this case will stress incidence, etiology, treatment and mortality.

The incident depends upon the type of surgery performed, the location of the incision and the diseased condition for which the patient was operated. Bowen[2] states that the incidents varied from 2 to 3 per cent of all abdominal operations. Colp,[3] in 1944, reported twenty-six cases of wound disruption in 2,750 laparotomies, an incidence of 0.9 per cent. Bogle,[1] analyzed twenty-seven cases in Brooklyn Hospital occurring from 1935 to 1946, with the results shown in the accompanying table.

Year	Number	Year	Number
1933	1	1941	3
1936	0	1942	2
1937	4	1943	2
1938	1	1944	3
1939	2	1945	4
1940	1	1946	4

As seen by this table, more cases occurred in 1946 than in 1935 and 1936, and yet our knowledge of biochemistry has steadily increased from that time until the present.

The etiology of wound disruption has been stated by various authors as faulty incision, faulty suture, rough handling of tissues, method of closure, the disease for which surgery was done and physical condition of the patient pre-operatively.

Bowen[2] reported thirty-four cases in 1944 and drew some interesting conclusions which follow. Laparotomies for malignancy give a high incidence of wound disruption. Previous laparotomies with resultant scar tissue predispose to wound breakdown. He feels that the type of incision has less to do with disruption than does the disease for which the patient was operated. Colp[3] states that 28 per cent of eviscerations occur when the surgery is done for malignancy. The anesthetic, we feel, plays a part in failure of wound healing, only in that the poorly relaxed patient is difficult to close. We also feel that the suture material and type of closure is of little importance except that heavy suture material and large knots make for foreign body reaction, collection of serum and wound dehiscence.

In closing a wound, care should be exercised in accurately closing the peritoneum. Also, interrupted sutures should be placed in the fascia if the wound is large. It is also important that the fascia be definitely identified as each suture is placed.

It is generally agreed that the pre-operative condition of the patient is important. Serum protein should be done on every patient subjected to major surgery. Total protein should be 6.3 to 8 grams per 100 c.c. The A-G ratio should be 2.5 to 1, (clinical interpretation of laboratory tests Goodrich).

Large doses of Vitamin C and Vitamin B Complex should be given to all patients pre-operatively and postoperatively.

Glaser,[4] Colp,[3] and Bowen[2] attest to the fact that certain postoperative conditions which increase intra-abdominal pressure can be the cause of wound disruption. Of these, may be mentioned cough, hiccough, sneezing, gagging, vomiting, and gastric lavage. Trueman[7] states that while any or all of the above may be the immediate cause, the real reason for wound dehiscence is delayed wound healing brought about by hypoproteinemia, low vitamin level and malnutrition. Essentially the same observation was made by Bogle.[1]

Most writers feel that age is a factor only in so far as it relates to debility of the patient. Bowen's[2] series ranged from two months to sixty-eight years. Most cases of wound breakdown occur during the winter and spring months.

Mortality, according to Bowen, varied from 15 per cent to 75 per cent. Colp,[3] as stated previously, felt that the mortality rate is about 28 per cent.

Two cases similar in some respects to our own were found in the literature. Nicholas,[6] in 1946, reported a case of a sailor's wife who had been away from her husband for six months and who had coitus twice with him in the course of the afternoon. She sustained a two-inch laceration of the vagina behind the cervix. Hemorrhage was sufficient to throw the patient into shock. Lask[5] reported a case of a fifty-eight-year-old woman who had sex relations with a thirty-year-old lover after a year of total abstinence. She sustained a tear in the vaginal wall through the peritoneum with evisceration of the intestines into the vagina. Neither of these cases had had previous surgery. Further, my patient had not had coitus for some time previous to her evisceration.

Comment

Several interesting features of this case are worthy of emphasis. The breakdown of the vaginal wound eighteen months postoperative and the abdominal evisceration were both caused by the virus pneumonia and severe cough, which accompanied this condition. The patient, as the result of the pneumonia, was of course in a poor state of nutrition and was not a good surgical risk on either occasion. Surgery was not elective but imperative in both instances.

Summary

A case is presented of a forty-eight-year-old matron with evisceration occurring eighteen months following a successful vaginal hysterectomy. Evisceration was brought about by virus pneumonia, severe cough, and resultant lowered nutrition. Laparotomy was done, the evisceration corrected, the rent in the vagina repaired and that structure suspended. The cough persisted, and five days later the abdominal wound broke down. Both wounds healed with control of the respiratory infection and improvement in the patient's nutrition.

The literature was perused and no parallel case could be found. A review was made as to incidence, etiology, treatment, and mortality of wound disruption.

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HOUSE VETOES PLAN NO. 27

When on July 10, the House of Representatives voted 249 to 71 rejecting President Truman's Reorganization Plan No. 27, transforming Federal Security Agency to Department of Health, Education and Security, it passed judgment on what many of its members refer to as "socialized medicine." Efforts by FSA Administrator Oscar R. Ewing and others to disassociate the plan from National health insurance notwithstanding, it is plain that the vote's outcome expresses the members' convictions and feelings with regard to the influence which creation of the new Department would have—assuming Ewing were named Secretary—on future enactment of the President's health program as set forth in the Thomas-Murray-Dingell Bill.

The General Practitioner Visits the National Health Doctor

By Ronald E. Clark, M.D.
Detroit, Michigan

GREAT BRITAIN served as host in London for the World Medical Association, a third annual meeting that brought together the leading officials of the medical associations around the world. During these October sessions there was much discussion of the medical service available in various countries and peoples. No representatives were present from the Communistic countries behind the "Iron Curtain" but forty countries were represented with a total attendance of 230 persons. This was an ideal forum for collecting information on the medical services available to people in all countries. The World Medical Association is a policy-making, inspecting and promoting agency for improved medical care and postgraduate medical education around the world —constituted of delegates from member medical associations.

On landing of the "Strato-Cruiser" at London's Heathrow Airport, we received our first contact with the NHS (National Health Service) in the form of brochures telling us about the medical service and where to report in the event of illness. We visited London's oldest hospital (St. Bartholemew's) and some of the newest (Uxbridge Cottage Hospital).

Improved health stems from intelligent, vigorous co-operative efforts along long-range well-supported directions. The war provided the stimulus for intense medical study and education—this represents progress. Another stimulus—to make an England fit for heros to live in—served to guide the voters and politicians to promises which were impossible to fill. The Labour government seized the first opportunity to coop the medical services under the Ministry of Health through the NHS Act.

This added another country to Russia, Germany and New Zealand to have socialized medicine. As Dr. Guy Dain explained, it came with a tour-de-force which was augmented by the split between specialists who were granted hospital and other privileges, and the general practitioner, busy and apathetic, who was "sold down the river" into the unscrupulous hands of the ministry.

In one blow—the hospital funds, fellowships, annuities, legacies, grants, endowments—all the medical resources of the country were conquered and taken over by Aneurin Bevan—a Welsh coal miner (union socialist educated) in his role as Minister of Health.

Thus the National Health Service, which served as vote-getting promise of the Labour government, was converted into a revenue fund to be administered by party members for the benefit of the party rather than for the patient, doctor or hospital. "Keep politics out of this picture" or the picture is changed entirely—as it is in England. Control of medicine has passed from the hands of the doctors of medicine to the politicians of the realm. Medicine joins in the ranks of socialism as a tool for the complete subjugation of the country to the ideals of Fabian Socialism (a group formed in 1853). Thus the political *"flying-wedge"* technique has subjugated the noble profession of medicine as completely as in Nazi Germany.

Existing London health services are minimal, by our standards, and in other areas the standards of care are worse. NHS has delivered a near death blow to the people in need of medical care.

Hospitals in the London area are undermanned and using equipment from lend-lease and war surplus. The nursing problems are as strict as those of the physicians. Discriminatory measures are in effect against those who are not signed up as full time NHS employes. For example, one hospital staffed by three NHS nurses and eight private duty nurses had orders to discharge the private nurses! No appeal. The hospital had to be closed for this reason! All of this in an area where one of the greatest needs is additional medical facilities.

Hospital Surgery

Dr. Mathews was busy from 7:30 p.m. to 10:30 p.m. performing skin grafts and plastic repairs which were scheduled for University College Hospitals early afternoon surgery. Naturally he missed his meal at home with the children and does frequently because of the inefficiencies which keep all the hospital operating rooms running to this late hour. The instruments and rooms are well cared for by the short-handed nursing staff. One relapsed surgical patient was brought to the surgical amphitheatre in his bed—partly because of limited personnel to transfer him and because of his critical situation. The anesthetist student had a near impossible time climbing over the head of the bed in

an effort to give the necessary cyclopropane. Dr. King, a junior student up from Cambridge, explained the long hours and the necessity of keeping hospital appointments as the only way to escape general practice under the NHS. One has no opportunity of getting a specialty hospital residency appointment once he has left training or failed to secure an appointment or once assigned by the ministry. Thus the competition for these appointments is keen, since they represent the only possible entry to a reasonable practice of the profession of medicine, partially free from political domination.

These students are housed in the University of London hostel—an apartment with single rooms heated by a gas burner in the fireplace fed through a quarter-meter. The enormous window was open from the top because it couldn't be shut. (I often wondered what happened in the London hurricane which struck the week following my visit!)

Over ale at the pub, I found the medical students to be the most industrious and enlightened individuals, actively working for good education and carrying on in splendid style. They had experienced poverty in their struggle for an education and they really were in no worse position under NHS except for political appointment influences. One medic was anxious to get home because his wife had secured some chops—the first in a long time of meat rationing—so he left at 10:30 p.m. We adjourned for a good meal at J. P. Lyons at Charing Cross—one of the first really tasty meals anywhere. (One can always trust the medics for ferreting out the best values in the eating world.)

St. Bartholemew's Hospital provided an education in antiquity—the ancient charter of Henry VIII was shown to us with many other prized documents—Harvey's book on circulation, Veselius' Anatomy, et cetera—prizes—many written by men of the Bart's staff. Heavily bombed, this hospital had a few lives lost in the "blitz." Now the work of repairing goes ahead slowly. The hospital is neat and clean and cheerful. The facilities are crowded by patients eagerly awaiting admission to the OPD and regular hospital, by the patients undergoing laboratory tests, and by the postoperatives and those convalescents or incurables who have no adequate home care or convalescent home available (hence they stay on at government expense). All equipment is prewar or war-surplus, even in their remodeled operating rooms.

The million-volt x-ray unit provided all of their present cancer therapy. The radioactive therapy was largely confined to Cambridge where the necessary atomic research precautions were available. Tea is served every afternoon—everywhere—we did enjoy the fine hospitality which "Bart's" showed us.

Cottage hospitals are the only haven of the general practitioner—when a patient needs hospitalization, he is lost to the GP, who must send him to a specialist. Why? Except for obstetrical work, which is done in both home and cottage hospitals, operative work is the perogative of the specialist. The GP gets no fee for any work rendered his NHS patients, whether it be a tonsillectomy, repair of laceration, fracture or minor surgery—and so the GP comes to have no interest, instruments, or facilities to take care of these ambulatory procedures. All of the laboratory work—urinalyses, blood counts, x-rays, basal metabolism tests, electrocardiograms, et cetera—is handled by the laboratory—and these facilities are especially overtaxed. Hence the patient really has slight chance of receiving these benefits when he needs them most.

The clinics and offices have cared for panel patients who paid monthly rates since 1911, but their wives and children and other non-insured were cared for privately by the same physician. Under socialism of medicine, the patients must be cared for by their NHS physician and must give reason for changing their doctor and suffer great delay in being reassigned to the doctor of their choice. Because of the high cost of living and taxing, all or nearly all are forced into the normal NHS channels of care. "Bootleg medicine" exists—some additional monetary consideration—to get glasses delivered in six weeks instead of the customary six months or longer! Many patients are embarrassed at having the doctor visit them without payment, and they delay calling the physician. Physicians have many useless calls for soap, meat, eggs, milk, time-off certificates, glasses slips, et cetera. The GP is a civil servant—busy with red tape in profusion.

The typical suburban doctor's office consists of a waiting room—one hallway, and patients overflow outside—the consulting and examining room, which contains the *file* of records and *desk* for certificates needed for eggs, meat, butter, soap, and sickness insurance; a wooden *examining table* and a *sink*, with perhaps a wall cabinet for miscellaneous articles. One office had an infrared lamp

which had not been used for some time since the NHS provides no replacements or remuneration to the physician for physiotherapy. The same is true of blood counts, x-rays, urinalyses, electrocardiograms, basal metabolism tests, et cetera—all of these services must be provided elsewhere at inconvenience to the patient, who must rely heavily on public transportation and a greater cost which must ultimately be borne by the patient. No, there is no social short-cut! England has penalized the general practitioner, and the people and the doctors are both suffering from the breach in an ancient and honorable physician-patient relationship.

The English physician maintains his home and office together in the London suburban area—and the gate post carries a red signal lamp—and the busy doctor finds it conservative to douse the light in an attempt to get a night's sleep. The telephone service is bad—at night especially—fifteen minutes to make a call. The telephone is located in the hall, so that the doctor or his wife must trot for it, night or day. The modern convenience of a desk phone and an extension service is unknown—almost all residents rely on a neighborhood outdoor phone (pay station—known as a kiosk). The service is very slow, and in many cases it would seem faster to walk to the doctor's office than to wait the operator and subsequent faulty connections. And this is in the wealthy London district—not in the coal mining or other impoverished areas!

For the busy English doctor, such as Dr. Tanquez, the only rest that he could get was to go to the hospital for treatment of his coronary condition. He is not permitted to leave his practice unattended—and the price and scarcity of a "locum" makes such an assistant nearly unobtainable. The doctor gets no trips to the seashore, no Sundays off, and no postgraduate study allowances. The Sense committee has recommended an increase in the doctor's stipend, but no action has been taken in that direction. None of the medical students consider general practice as a career by reason of its inferior rating and near poverty-producing regulations.

For house calls, the English physician has a real chore—the autos are old, gasoline is rationed, the streets are narrow, and only a few main roads carry the same name for more than a block or two. Contact with the office is difficult because the home which he is attending is unlikely to have a phone and it takes five to ten minutes to complete a call. Because of the limited transportation, the doctor makes more calls to see sick children than would be the case where automobiles are readily available for transportation. Thus the conscientious English doctor is busy and expends great effort to provide adequate medical care to his patients—and he receives no allotment for extra gasoline and car expense to make these trips. So he is a government servant providing at his own expense his transportation and tools for caring for the sick—and he is not free to accept any stipend from the child's parents for this trip. Theoretically, an ambulance is available for this transportation, but it is only with difficulty that one obtains even a taxi in these suburban areas.

Ambulance service has been taken over by the NHS, and Mr. King, with whom I stayed, had been taken to the hospital every morning for about seven months when his out-patient-clinic care for sciatica had been completed. Mr. King was grateful for this care, but found no relief from his pain and hence he had discontinued his treatments.

Postgraduate Education

Postgraduate education does not have the emphasis nor the attendance which is advisable. The present educational facilities are crowded—professors have a busy ward and clinic and teaching schedule. The availability of hotel and housing quarters is minimal, and until bombed out quarters are repaired, the building of new facilities, which are badly needed, will be delayed. The publications of the medical profession in the British Isles are of good quality, but they were absent from the general practitioner's office because he is priced out of the field and no special journal caters to his problems. The big emphasis in the teaching centers is for the various specialties. Since the English general practitioner has no assistant or "locum" to take over in his absence, he is unable to attend lectures and clinics. Because of the strict limitations on travel, it becomes nearly impossible to travel abroad—one may take only 5 pounds ($14) out of the country. It becomes a problem of finances to secure the broad education of which the English physician is so proud. With the center of medical education having shifted to the United States since the first World War, the English doctor has little contact with the dollar-producing medical center. Numerous conventions, scholarships, and prizes have promoted travel for

postgraduate and lecture tours, but this is of no help to the GP.

It was the privilege of the WMA delegates to be entertained at Lancaster House by His Majesty's Government and to be received by Aneurin Bevan, Minister of Health. For several hours we discussed the problems of the nation's health and the plans for completely socializing the British health services—even those religious and private institutions that had thus far held out from the program—also the nationalization of steel and the whole of the Fabian socialist program for the British Isles.

How strange it seems to have as head of a world famous medical nation a Welsh coal-miner socialist! It would be just as appropriate for us to have a Missouri haberdasher providing us with medical care! Thus, by revolution, the slow orderly progress in English medicine has been turned topsy-turvy! Extension of medical service is impossible with the ministry far in arrears with it's current budget which exceeded all estimated costs by two and one-half times. The only prospects are those of retrenchment and austerity.

Great Britain's economic situation is deplorable by reason of terrific expenditures (deficit financing) and unreasonable socialization of heavy industry and handcuffing of private enterprise. The apathy which has prevailed in England is that of a completely disillusioned people. These people, through the war, were bolstered by the vision of an England—"a land fit for heroes to live in." Actually England is suffering far more from the present socialistic revolution than from the "buzz bombing" of the war.

Radio and news broadcasting is restricted—controlled by the government. Newsprint is rationed to such an extent that *The Strand* is suspending publication after more than a century! Religion is handicapped by the restricted income of the parishioners. Travel is restricted by the rationing of coal, gasoline, and autos. Individual enterprise is stifled amid the growing list of regulations which require a Philadelphia lawyer to study. Taxation of industry and landholders parallels the "taxation without representation" of our own Colonial days.

Rationing of eggs, milk, cream, butter, cheese, nuts, meat, fats, soap, wheat, coal and feed severely handicap English living—even after one has the money to pay for food. Visiting and dining among friends is practically eliminated by the necessity of carrying one's own rations.

How can the people of Great Britain be so stupid? Why has the Fabian socialism (really akin to communism) taken over the Labour movement and finally gained complete control of the English government? Why do the people believe that they can be "Lords and Ladies" without struggle? Why do people continue to throw away their birthright—their ballot—for a mess of pottage? Why do the British want something for nothing rather than to rely on work and thrift for their security?

As long as we continue to subsidize their departure from thrift and work, so long will they continue to expect help. And their pattern of living will be copied by greedy politicians here and abroad who love the spoils of wealth which pour into their hands at the sacrifice of the nation's life blood.

It is for us to protect our liberty and freedom!

Our thrift and Yankee ingenuity have reaped a rich harvest.

This harvest cannot be dissipated without disaster to our nation and our people.

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MSMS

LOW BACK PAIN

(Continued from Page 916)

pronated feet, internally rotated femora, relaxation of the lower abdominal wall, lordosis with an anteriorly tilted pelvis, contracted sacrospinalis muscles, flat chest and round back, et cetera—are noted and corrected."

Conclusions

1. Spinal manipulation is a useful adjunct in the treatment of low back pain.
2. A complete history, review of systems, physical examination and roentgen evaluation must be done before manipulation is performed.
3. There are contraindications to manipulation.
4. Where there is demonstrable pathology other than an intervertebral disc injury or muscle spasm, manipulation is neither performed nor advised.
5. Patients with poor cardiac reserve constitute a definite risk to manipulation.

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Teratoma of the Ovary in a Child

By Clifford D. Benson, M.D., and
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OVARIAN TUMORS in infants and children are quite rare. In 1937, Witzberger and Agerty[7] collected all of the reported cases from the world literature of ovarian tumors in infants and children up to the age of ten years. Of the 186 cases thus studied, fifty-eight (31 per cent) were classified as dermoid cysts (forty-five) or teratomas (thirteen). Since this analysis, there have been numerous case reports of teratoid ovarian tumors in children. The reports of Mazzola and Ryan[4] and Mayo and Butsch[3] are of particular interest. Ladd and Gross[2] discussed the general problem of diagnosis and treatment and collected their four cases of dermoid cyst and two cases of teratoma occurring in girls ranging in age from six to eleven years. Recently (1949), Dargeon[1] reviewed the fourteen ovarian tumors of children removed by him at several New York hospitals. Five of these tumors were dermoids and one a teratoma.

Clinically, the dermoid cysts and teratomas are frequently classed as one group. Pathologically they differ somewhat although they have many common features. According to Novak,[5] teratomas are solid, although they may show occasional small cystic areas. There is always a conglomeration of elements derived from all three germinal layers. Teratoma is regarded as a malignant tumor, the fetal elements being of undifferentiated type and the clinical course being characterized by recurrence and metastasis, with death in a large proportion of cases. Other authors state that a teratoma may reach large size and still retain rather benign features.[2] Solid teratoma is far less common than the dermoid cyst, but is said to be proportionately more common in younger individuals than the dermoid.

The clinical diagnosis of an ovarian tumor in a child may be difficult. The tumor is originally brought to the parents' attention in usually one of the following ways: (1) increasing growth with abdominal deformity, (2) mechanical pressure on

Fig. 1. Plain radiograph of the pelvis, showing the soft tissue mass in the midline of the pelvis containing curvilinear streaks of calcium and low bone density.

Fig. 2. Tumor of the right ovary, following removal.

Fig. 3. Tumor after sectioning, showing nodular and multicystic interior.

From the Departments of Surgery and Radiology, Harper Hospital, Detroit, Michigan.

surrounding organs, (3) pain from torsion of the pedicle, or from rupture if the tumor is cystic, and (4) endocrine disturbances (characteristic only of the rare functioning tumors of the ovary—

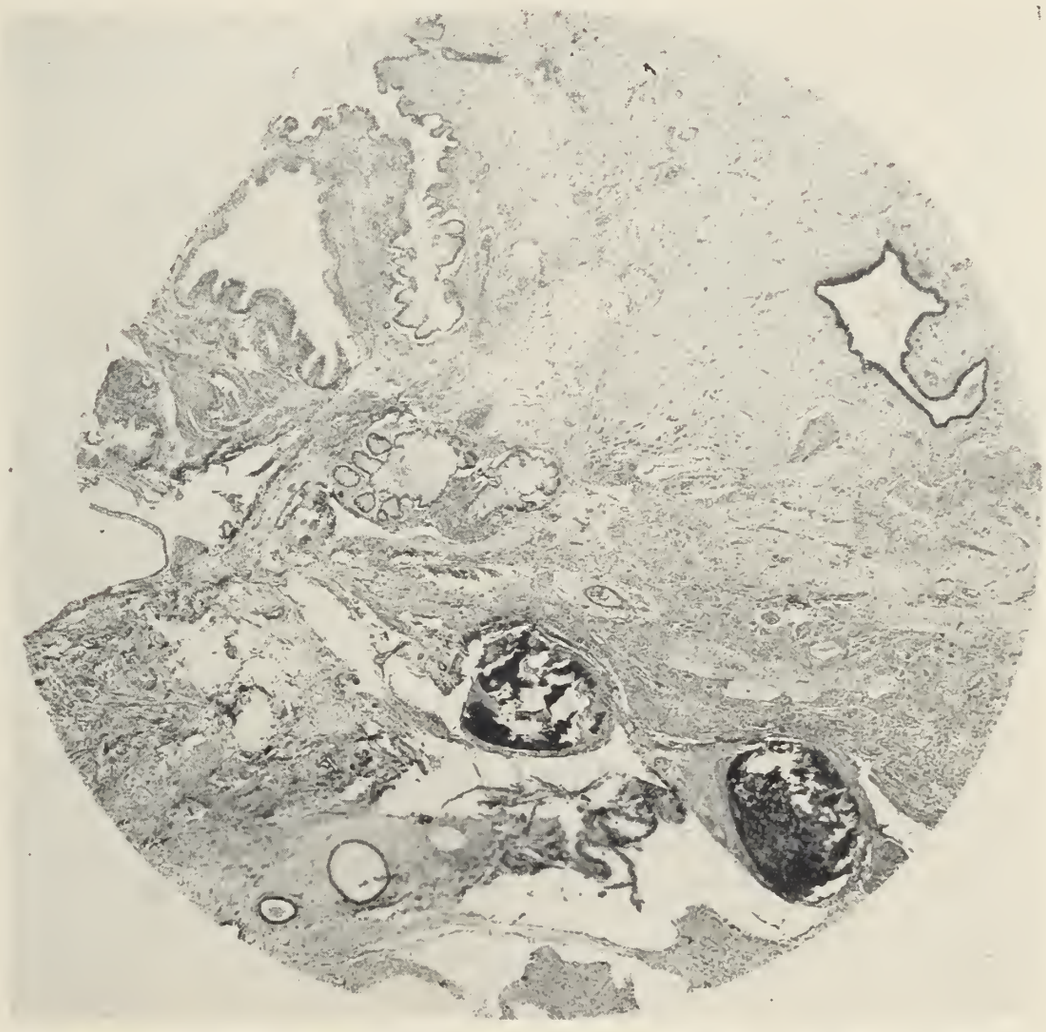

Fig. 4. Medium power photomicrograph of section of the tumor near its capsule, exhibiting cystic areas, glandular structures, and in the midportion of the field, a small area of calcification of amorphous character.

arrhenoblastoma, granulosa cell tumor, dysgerminoma, et cetera).

Steel[6] found that in one-third of cases, pain from a twisted pedicle was the first sign leading to the recognition of an ovarian tumor. It is noteworthy that the pain is often intermittent, and may vary from vague discomfort to severe cramping. The abdomen is often distended and there is often a slight temperature rise and leukocytosis. These signs may, as in the present case, lead to a diagnosis of appendicitis.

Palpation of the abdomen or rectal examination may reveal a cystic mass which is movable and usually non-tender (except when there has been torsion of the pedicle). In the cases in which no tumor is palpable or in which the exact nature of the mass is in doubt, the plain film of the abdomen may be of great value, as illustrated below.

The following case presents the typical history and findings of an ovarian tumor in a child, and illustrates the use of roentgen examination in arriving at a correct pre-operative diagnosis.

Case Report

S. S., a seven-year-old white girl, was admitted to Harper Hospital on June 7, 1949, complaining of intermittent abdominal pain and nausea and vomiting of three days' duration. The initial symptoms had been sudden peri-umbilical pain followed by an episode of nausea and vomiting and a subsequent bowel movement which was described by the mother as "normal." Following this, the generalized abdominal ache began. On the second day of the illness, the patient vomited twice, refused food, and appeared to be feverish. An enema was given with no unusual result, and no relief of the dull abdominal pain. She was first seen by a physician on the morning of admission, the third day of illness, and was found to be not acutely ill, but definite abdominal

tenderness and an oral temperature of 99.8° F. prompted hospital admission. The admission diagnosis was possible appendicitis with rupture. Surgical consultation was requested.

The patient's birth, developmental and past histories were unrevealing.

On physical examination, the temperature was 99.5° F. (rectal) and the pulse 104. The child appeared healthy and was in no acute distress, but did admit to dull generalized abdominal pain and anorexia. Inspection of the abdomen revealed a slight suprapubic bulge which on palpation was smooth, slightly fluctuant, movable, tender, and the size of a grapefruit. It was located in the midline of the pelvis and extended almost to the umbilicus. By rectal and recto-abdominal palpation the tumor was thought to arise in the pelvis and possibly represent an ovarian cyst.

The laboratory findings were: red blood cells—4,200,000, hemoglobin—10.2 grams, white blood cells—12,300 (82 per cent neutrophils, 11 per cent lymphocytes, 5 per cent monocytes, 1 per cent eosinophils and one per cent basophils). Urine and serology, negative.

Roentgenographic study of the abdomen and pelvis (Fig. 1) showed a rounded soft tissue mass within the pelvis, in the midline. Within the mass were seen curvilinear streaks of low bone or calcium density arranged irregularly throughout the tumor. The diagnosis of dermoid cyst or teratoma of the ovary was suggested.

Operation was performed (C.D.B.) two days after admission to the hospital and a firm smooth mass measuring 12 cm. by 6 cm. by 6 cm. was found arising from the right ovarian region. No normal right ovarian tissue was seen. The tumor had a broad pedicle which showed evidence of previous torsion but no necrosis. The uterus was infantile in type, the right tube was rudimentary, and the left tube and ovary appeared normal. The ovarian tumor pedicle was clamped and the mass easily removed. There was no evidence of metastatic lesions in the peritoneum, omentum or in the pelvic and abdominal organs visualized. The abdomen was closed in the usual manner, and the patient's postoperative course was entirely uneventful.

Pathologic Diagnosis.—The gross specimen (Fig. 2) consisted of a smooth oval mass measuring 12 cm. by 6 cm. by 6 cm. with a distinct capsule. The external surface was a reddish-brown in color and was somewhat glistening. On section (Fig. 3), the surface presented multiple nodular and cystic masses of red, white and yellow color, but the tumor was generally fairly solid throughout. There were scattered areas of calcification and cartilage formation, but no bone or teeth were discernible. A few dark, long hairs grew in several areas of the internal aspect. The microscopic diagnosis was solid teratoma of the right ovary showing scattered areas of calcification, and showing no particular malignant features (Fig. 4).

Summary and Conclusions

1. A case of a teratoma of the right ovary in a seven-year-old girl has been presented.

2. Preoperative diagnosis was aided by the use of a plain radiograph of the abdomen, which revealed characteristic calcification within the tumor.

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MSMS

MICHIGAN RURAL HEALTH CONFERENCE

(Continued from Page 896)

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ONE TO 750

Just announced are the statistics reported by Dr. George F. Lull, Secretary and General Manager of the AMA, that the United States has one physician to every 750 inhabitants. The actual total of doctors is 201,278.

Very significantly, this is the best showing of any nation in the world except Israel, where there is a great influx of professional people, including doctors.

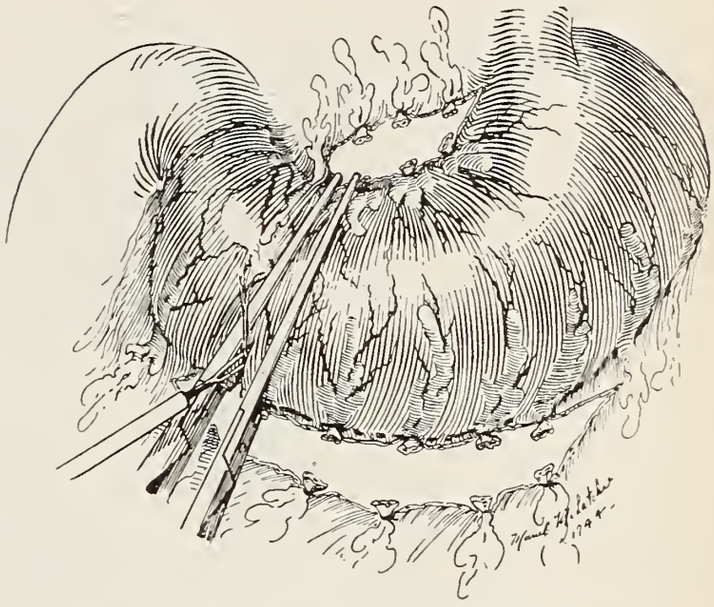
As to other leading nations, here are the ratios:
Great Britain: one doctor to every 870 persons.
Iceland: One to 890
Denmark: One to 950
Canada: One to 970
New Zealand: One to 970
Australia: One to 1,000
Switzerland: One to 1,000
Sweden: One to 1,000
Spain: One to 1,000
Norway: One to 1,000
Netherlands: One to 1,000
Luxembourg: One to 1,200
Czecho-Slovakia: One to 1,300
France: One to 1,300
Eire: One to 1,500
Bulgaria: One to 1,500
Finland: One to 2,200
South Africa: One to 2,400
Egypt: One to 4,200
China: One to 25,000

The Duodenal Stump

By W. W. MacGregor, M.D., F.A.C.S.
Detroit, Michigan

THE SURGICAL treatment of duodenal ulcer is in reality based upon two operations, one aimed at the successful closure of the duodenal stump, the other, at sufficient removal of at least two-thirds of the fundus of the stomach. The object of these procedures is to produce a diminution or abolition of acid gastric secretion and if possible the removal of the ulcer. However, there is still considerable confusion in the minds of many surgeons as to how the ulcer itself should be treated. A great deal of evidence shows that a more conservative attitude is manifested toward the duodenal ulcer which is the more difficult to remove. This type of ulcer sometimes produces problems of duodenal closure, and after its excision sometimes gives rise to serious and even fatal complications arising from the duodenal stump. Of course, an ulcer in the first portion of the duodenum which is easily accessible and easily dissected free should be removed if only to satisfy the pathologist with a specimen and the surgeon with a sense of achievement. One thing that must be accomplished, however, is the removal of the antrum.

Writers who are well informed on the functions of the stomach and duodenum have remarked that one could spend an entire lifetime in the reading of all the literature dealing with the physiology of the stomach and duodenum and the treatment of their pathology. One only has to be familiar with the literature, or to have visited various clinics, to be aware of the many different techniques employed in duodenal stump closure. Yes, in the same hospital no two men may employ the same techniques. For instance, we see Walters using the small Pyar clamp with the Parker-Kerr inverting stitch, and Finsterer[6] employing his simple surrounding ligature, then severing the proximal portion of the duodenum and utilizing a purse string inverting suture of the distal end and reinforcement. Others use Graham's three hemostats and amputation proximal to the middle one, this removed and the fringe of duodenum closed by over-and-over stitch and reinforcement. Others use the Furniss clamp, and still others the ordinary clamp and suture below it, then reinforcement. There are those who do not use any clamp at all; they simply keep the stoma open until closed by an inverting Connell's suture, and then reinforce. This last procedure is preferred by a great many as it is supposed not to crush or traumatize the duodenal stump. However, it must be realized that a stump that was supposedly satisfactorily closed by this method may leak, as too many sutures or sutures applied too tightly may produce a constriction of its blood supply with consequent anemia at the suture line. Another factor one must consider is that from 1,000 to 1,500 c.c. of normal duodenal content of bile, pancreatic juice, and secretions of duodenal mucosa are secreted in twenty-four hours, which will produce considerable intra-luminal pressure if there is any interference to the flow through the jejunal loop at its stomach anastomosis, which may be due to a kink, twisting, or edema. This may be only temporary; nevertheless, the duodenal stump must be able to withstand this pressure.



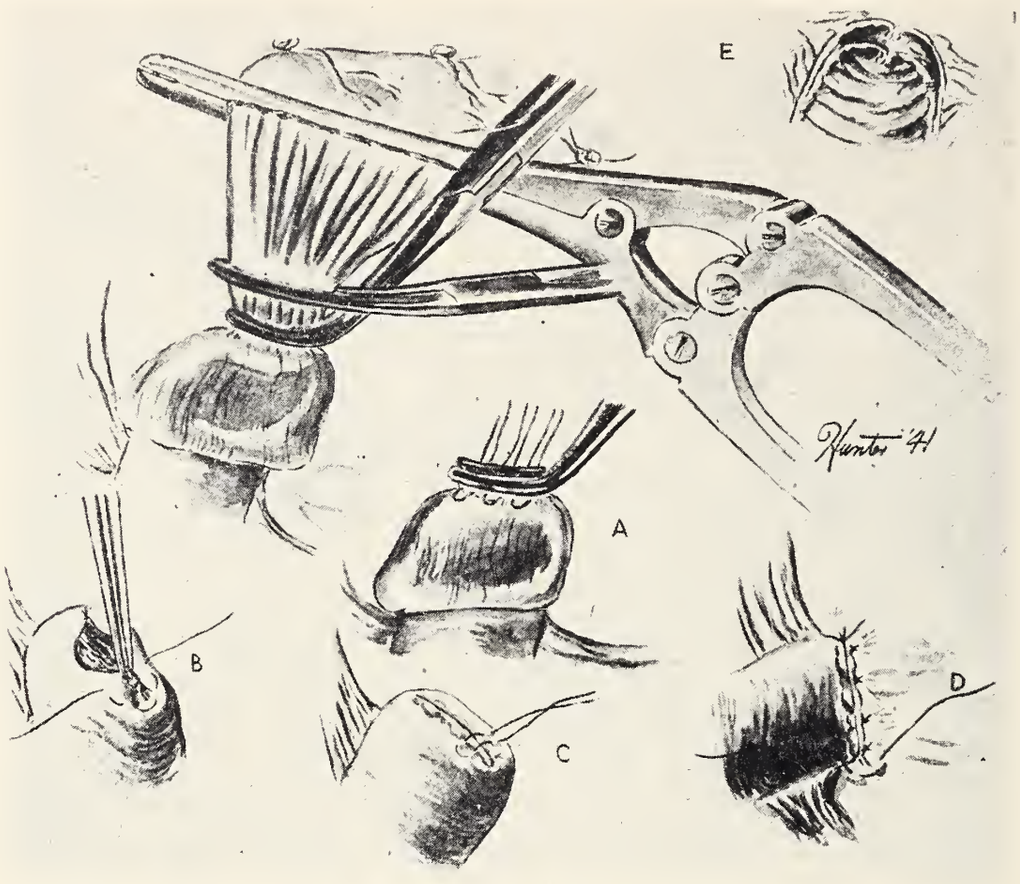
First stage of the two-stage operation, leaving the antrum in. The stomach is transected with a cautery between clamps at least 8 cm. proximal to the pylorus. In three to twelve weeks, the antrum and pylorus are removed.

All the closures above mentioned have their adherents and, in the hands of those who have their preference, are quite adequate. The problem that now faces one is what is the proper procedure in the following conditions.

Before stating these, one must remember that Edkins[4] work in 1906 showed that antral tissue is the hormonal control of gastric secretion and that this tissue must always be removed. However, more recent reports have shown that the same result may be obtained by using mucosa from the

fundus of the stomach.[3] This is one explanation why stomach ulcer does not occur as often if two-thirds or three-fourths of the fundus of the stomach is removed.

source of the peritonitis. Between January, 1942, and December, 1943, of a series of gastric operations, ninety-four were for duodenal ulcer. Sixty-three cases involved the classical one-stage opera-



Exclusion operation as practiced by Bancroft and others. Note at *E* the dead space resulting from inverting the serosa. This is eliminated by simply bringing the serosa together without inversion. (See text—Wagensteen's procedure).

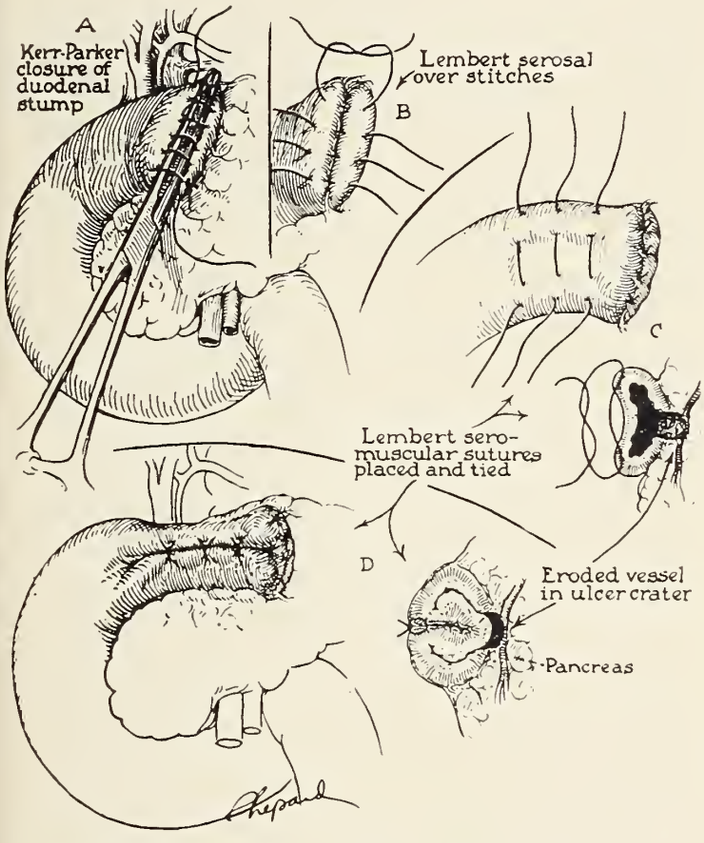
McKettrick, Moore and Warren[7] report that in conditions of inflammatory fixation of the pylorus and duodenum, where the landmarks are destroyed and where duodenal closure is difficult, and in cases of obstruction, plus local reaction, and in some cases of recent bleeding (but not acute massive hemorrhage), and in the poor risk patient, excellent results may be obtained from a two-stage procedure leaving the antrum without removing the mucous membrane, disturbing the duodenum as little as possible, and completing the gastric resection at the first stage; then, in three to twelve weeks removing the antrum and pylorus as a second-stage operation. By this time, the inflammatory reaction or bleeding has subsided. They report that from 1936 to 1941, from a series of gastric operations, one hundred twenty-four for duodenal ulcer, there were ten deaths, a mortality of 8.1 per cent. Five of the ten were from peritonitis. Three cases showed the duodenal stump to be the

tion; in eight cases the antrum was left in but mucosa was removed; in twenty-three cases the two-stage operation as mentioned above was carried out. Only one case of duodenal stump leak occurred, and this was non-fatal.

Wangensteen[10] reports on the exclusion operation first reported by Finsterer in 1918, later in 1926 by the Dutch surgeon Wilmanns, and in 1932 by Bancroft[2] in this country.

The indications are as stated above, but Wangensteen stresses that a sealed duodenal perforation in the supra-duodenal part at the gastro-duodenal ligament is difficult to close by any means; and, in those cases where there is considerable induration in juxtaposition to the ulcer, bringing about compression and obstruction making the duodenum difficult to mobilize, his procedure for the exclusion operation differs from that of Bancroft and others, in that he does not invert the peritoneal coat over the pyloric stump. He simply brings this

together after tying off the mucous membrane at the pylorus and bringing the muscular area together by Halstead stitches. His mortality has been greatly reduced since he adopted this procedure,



Method of closure of duodenal stump. McNealy's procedure.

and he attributes this to the elimination of the dead space between the pyloric muscle and the closure of the serosa.

Finsterer,[5] too, reports that his mortality is less where the pylorus is left in, and he warns that when the exclusion is done distal to the pylorus satisfactory mobilization or closure is difficult when the induration is equal to the diameter of the bowel. He also advises that the duodenum is to be mobilized laterally, the upper part of the stomach adjacent to the pylorus opened, the pylorus dilated. the finger inserted to palpate the exact location of the ulcer; his exclusion distal to the pylorus is applicable to ulcers situated near the entrance of the duodenal papilla. If possible, the duodenal ulcer is removed, leaving the base. He drains in all such cases.

In duodenal hemorrhage, resection is advised. In bad cases where resection is not possible, the duodenum may be packed with gauze against the head of the pancreas—this for no longer than twenty-four hours, as necrosis of the head of the pancreas may occur.

McNealy,[8] in 1946, advised closing of the duodenum just distal to the pylorus and then producing a tamponade by inserting three sutures transversly about 1 cm. apart, thereby narrowing the duodenum by bringing the anterior and posterior walls together.

Aleson,[1] of Los Angeles, recently reports the use of a disintegrating tube, one limb fitting into the stomach, the other two into the efferent and afferent loops of the anastomosis. Also, Marshall[9] exposes the common duct, and in cases where necessary, he opens this and inserts a rubber T tube for guidance.

I believe that in cases where the pathology is present as mentioned, the surgeon should be very cautious about his dissection and his desire to explore the ulcer crater. Too much enthusiasm to remove these lesions may lead to considerable difficulty and prolonged effort, tiring to himself as well as the patient. The surgical procedures as presented should not be forgotten when encountering such pathologic changes in the duodenum.

In conclusion, it is good surgery always to drain down to Morrison's pouch when any dissection is done on or about the duodenal stump, and either bury this stump into the pancreas or use a generous amount of omentum over the suture line.

Summary

A brief review is given of the methods of closure of the duodenum stump; and the importance of the removal of the antral portion of the stomach is emphasized whether the operation for duodenal ulcer is done in one or two stages or by the exclusion method.

1904 David Broderick Tower

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Multiple Sclerosis

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IT IS only about 110 years since multiple sclerosis was first recognized as something special, something distinct from other diseases of the nervous system. In our medical terminology, such a distinct disease is called a morbid entity because of its specific clinical behavior, its anatomical identity and its special and uniform cause. A morbid entity has to be distinguished from a polyetiological syndrome (Jelliffe), in which identical clinical pictures and eventually anatomical lesions are produced by a number of different causes. It is easily understood that because of its obscure cause the morbid *entity* of multiple sclerosis has been questioned again and again: Pierre Marie emphasized a causative relationship of multiple sclerosis to a variety of previous infectious diseases (variola, pneumonia, dysentery, pertussis, measles, scarlet fever). Strümpell, together with his pupil Eduard Müller and others, attempted to distinguish at least two fundamentally different polysclerotic diseases: A primary type due to an obscure endogenous abnormal reaction of the neuroglia, and a "secondary" multiple sclerosis as an inflammatory disease. Hassin considers multiple sclerosis a degenerative disease and eliminates from it all cases with marked inflammatory reactions in spite of an otherwise identical pathological picture of demyelination and catabolic reaction. For him these latter cases should not be considered genuine multiple sclerosis. Recent attempts to group multiple sclerosis and various other demyelinating diseases together as possibly caused by venous thromboses (Putnam) show also a tendency toward the concept of multiple sclerosis as a polyetiological syndrome. The most recent studies of experimentally produced demyelinating encephalomyelitides (E. Kabat, A. Wolf, Ferraro, Roizin, Morrison) compare the pathological lesions and clinical signs in these experimental diseases with those of multiple sclerosis and conclude with reservation that multiple sclerosis may be caused by an allergic or anaphylactic reaction similar to that experimentally produced by a parenteral injection of brain substance.

In the period of a little more than a century since the discovery of multiple sclerosis as a disease entity our knowledge of this disease has well advanced. It was studied by internists, psychiatrists, opthalmologists and pathologists. Multiple sclerosis is essentially the domain of neurology. Since this branch of medicine for quite some time was not recognized as an independent department of medical sciences, the main early contributors to our knowledge of the disease were internists and pathologists.

Multiple sclerosis was first recognized as a disease entity by a French pathologist, Jean Cruveilhier. In his "Atlas d'Anatomie pathologique" 1835-1842, Vol 2, Livr. 32 and 38, he described the gross pictures in the central nervous system of fours cases of multiple sclerosis with lesions in the spinal cord, the bulb, protuberance, et cetera, and gave the clinical observations related to 2 of these cases. Charcot calls this Atlas "an admirable work which ought to be more frequently consulted by all who desire to avoid the disappointment of making second hand 'discoveries' in morbid anatomy."

Besides Cruveilhier, the English author Carswell is mentioned as one of the first who depicted lesions of multiple sclerosis (1838). But in Charcot's opinion, this author has drawn the materials of his work chiefly from the hospitals of Paris and does not relate any clinical case in connection with this subject.

The clinical history of multiple sclerosis begins with a paper by the German internist Frerichs (1849). However, the French School, Vulpian 1866, and especially Charcot and his coworkers (Ordenstein 1867, Bourneville and Guérard 1869) contributed much to our present clinical knowledge of the disease. Charcot was one of the first to recognize multiple sclerosis as a clinical entity and to distinguish it from other diseases of the central nervous system.

One happening reported in Charcot's lectures (English translation, 1877) may throw light on the clinical state of affairs concerning multiple sclerosis at that time: It is the amusing story of a very distinguished physician visiting the hospital. He was shown a case of multiple sclerosis "the new disease—a very fine specimen of the cerebrospinal type"—and after many wrong diagnoses were made by him, he gave up saying "this patient probably is

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a living compendium of all nervous pathology." Another revealing remark of Charcot deals with the differential diagnosis between multiple sclerosis and paralysis agitans. In Charcot's polemics against the German physician Baerwinkel and his opinion that there are no difficulties in differential diagnosis between paralysis agitans and multiple sclerosis, Charcot reminds Baerwinkel of an episode ten years before (1862). At that time the same Baerwinkel published an analysis of a case observed under Skoda's care diagnosed during life as paralysis agitans whilst on postmortem examination the case was typical for multiple sclerosis. Charcot mentions still another report of a case of multiple sclerosis revealed postmortem but clinically diagnosed as paralysis agitans (Hasse-Zenker). He is ready to concede, however, that the different disguises assumed "by multiple sclerosis are coarse masks and that today, when recent works (1869) have illuminated the field of diagnosis, it is scarcely permissible to be caught in the snarl."

Another historically interesting fact is the increasing incidence of the disease in various countries, apparently due to more widespread knowledge of its clinical appearance. Charcot, in 1868, reported that multiple sclerosis was not known in England: "I do not find it indicated in any of the standard works published in that country, not even in Dr. Gull's valuable collection." In 1878, the German internist, W. Erb, emphasized that in England multiple sclerosis had been unknown until that date except for a report by Moxon (1875). Erb himself, up to 1878, observed only nine patients with this disease. In this respect, it is worth noting that here in the United States multiple sclerosis was first entirely unknown, later on rarely seen (Spiller, Jelliffe, Starr, Wechsler) and now it is one of the most common organic diseases of the central nervous system, at least in many states located north of the deep South.

The great interest of distinguished physicians in the new disease prompted numerous contributions of their pupils, many in the form of doctor's theses. One of the most outstanding of these theses—nearly completely forgotten now—is that of J. Babinski, the famous French neurologist. In his thesis, published in 1885, there are valuable clinical as well as anatomical observations and colored drawings of spinal cord sections, stained with the new myelin sheath stain, reported the year before (1884) by Carl Weigert.

In spite of the great amount of accumulated knowledge, the enigmas of the origin and cause of multiple sclerosis still exist and still rouse vigorously our attention.

One of the most puzzling problems of multiple sclerosis in the past and at present is the treatment of this disease. There are more than 200 various therapeutic recommendations (Brickner) and as yet none of these has guided us to a cure. That, certainly, calls for therapeutic scepticism and reluctance to follow new therapeutic proposals. Yet, experiments of nature show us that there is a possibility of a cure: Think of the spontaneous disappearance of signs and symptoms of the disease, the so-called spontaneous remissions, in early cases of multiple sclerosis! In careful observation of these remissions we may be able to find a clue to an effective treatment. That was how the famous Viennese psychiatrist Wagner-Jauregg, observing a spontaneous cure by an intercurrent infection in another severe disease of the nervous system, developed his successful treatment of general paresis with artificial infection and fever.

The spontaneous remissions in multiple sclerosis render a critical evaluation of our treatments difficult. We are often unable to say in the case of a definite improvement to a more or less complete recovery whether this is due to our therapeutic efforts or to a mere coincidence of these efforts with a spontaneous remission.

In my opinion there are two different principles along which multiple sclerosis should be treated: The one I might call the *antiphlogistic* or *anti-inflammatory* principle attacking the cause of inflammation with chemical and microbial antibiotics. Based upon the theory of the infectious origin of multiple sclerosis and the frequent appearance of primary inflammatory lesions in the central nervous system, penicillin and other antibiotics were applied to two cases of more recent onset (one to three years' duration or shorter). The first treatments were started in 1945. Up to now seven cases were treated. The observation period of three to five years is too short to say anything definite about the effectiveness of this treatment in early cases. However, not one of these cases showed a relapse since the treatment. The other principle—much more difficult to accomplish and still only a future possibility—is the *regenerative* principle, namely, to find out whether or not and eventually how the damaged nerve elements, particularly the myelin sheaths, can be rebuilt. The formation of myelin sheaths around

the nerve fiber is a process going on regularly in prenatal and for many years in postnatal life of every normal higher animal and human being. The normal myelin sheath is built up probably with the aid of specific enzymes and hormones. We do not know anything about this normal biochemical process; however, it may be hoped for that knowledge of these hypothetical substances of enzymatic nature together with constant exercises of the neuromuscular apparatus will help in the reconstruction of the destroyed myelin sheaths.

There are many more research problems confronting us now and in the future: The isolation and experimental study of the causative agent of the disease, the environmental conditions as the sources from which the causative factor is spread, the mode of its transmission from the outside world into the human body, the question of specific immunologic reactions in blood and spinal fluid of polysclerotic patients and so on.

We are to be congratulated on having at our disposal now an institute in which our needs for coping with these problems can be covered. It is also fortunate that due to generous support by the Kresge Foundation the somewhat dark aspects of this disease begin to look brighter, at least in some respects. I mention especially the discovery of specific spirochetes in the brain of a subacute case of multiple sclerosis. A comparison of the morphology of these spirochetes with those found in two other previously examined subacute cases of multiple sclerosis revealed the identical nature of these microorganisms in all three examined cases. The tissue reactions in these subacute cases, especially in acute plaques, show quite specific histological patterns which facilitate the disclosure of the spirochetes.

The multiple sclerosis center is opened. It is our duty as physicians to fill it with medical activity. Inherent in this duty is our responsibility to the individual patient, to the National Multiple Sclerosis Society and its chapter, to the medical profession, to medical science and to the community. The tools and weapons are now in our hands to enhance our knowledge of the disease, to observe the natural defense mechanisms of the human victims of the disease, to appraise critically the effects of our treatments, to consider old problems of this disease from new angles, to detect errors of scientific conception, to raise new questions and so to help mankind combat a common world-wide disease of the central nervous system.

In conclusion, let me quote a sentence from Charcot: "The prognosis has hitherto been of the gloomiest. Shall it be always thus?"

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Detroit Physiological Society

Meeting—Thursday, April 13, 1950

Fluid and Electrolyte Balance in the Management of Acute Renal Insufficiency

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Studies of Na, K. Cl, N and water balance were carried out for periods of four to sixteen days in four cases of lower nephron nephrosis; studies of sodium and water balance were continued for longer periods in these patients and in six additional cases. Extracellular-intracellular partition of water and electrolytes was carried out according to the method of Darrow.

Marked fall in plasma sodium was encountered (1) during the oliguric phase, due partly to dilution of extracellular fluid and partly to intracellular migration, and (2) during the diuretic phase due to the inability of the damaged tubules to retain sodium. Spontaneous resumption of capacity to conserve sodium tended to occur about five to seven days after onset of diuresis. Utilization of plasma sodium levels and fluid balance as a guide to treatment will be exemplified.

The plasma potassium did not rise to toxic levels in these cases. In one patient who went through ten days of extreme oliguria following circulatory collapse due to diabetic coma, the plasma potassium remained below toxic levels as a result of intracellular uptake of potassium which was released from endogenous protein catabolism. Impairment in capacity to conserve potassium was demonstrated during the diuretic phase and in some cases necessitated administration of supplementary potassium chloride to combat hypopotassemia.

Hematologic Phenomena in Acute Disseminated Lupus Erythematosus

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Since the LE cell phenomenon was first reported in 1948, accumulating evidence suggests two important features which are associated with the relatively uncommon but highly fatal disease acute disseminated lupus erythematosus. First, the LE cell phenomenon may be specific for acute and subacute disseminate lupus and therefore be of differential diagnostic value. Second, investigation of the formation of LE cells has revealed a factor present in blood plasma from these patients which is necessary for the LE cell phenomenon. This factor is in the gamma globulin fraction.

The present study adds weight to the specificity of the reaction for acute disseminate lupus, since no correlation has been found with a representative group of other collagenous diseases. Using methods for induction of the LE cell phenomenon, we also have been unable to facilitate LE cell formation with the aid of hyaluronidase, commercial immune gamma globulin or wetting agents.

Three elements appear to be necessary for LE cell formation: (1) active neutrophils for phagocytosis, (2) cellular protein to be ingested in the presence of (3) the LE plasma factor, which appears to be a gamma globulin. We have applied these principles successfully to induce the LE cell phenomenon using fresh blood neutrophils, cellular protein from the buffy layer of outdated bank blood and plasma from cases of acute disseminate lupus. The LE cell phenomenon is therefore an immunologic event which correlates with the well-known abnormal immunologic features of the disease (drug and sunlight sensitivity, transfusion reactions, false positive serology and elevated serum globulin).

Some Important Etiologic Factors in Breech Presentation

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Multiple pregnancy and prematurity have long been known to have an associated increased incidence of breach deliveries. Weisman, in 1944, showed that about 24 per cent of fetuses present by the breech at about twenty to twenty-two weeks of pregnancy, and that this figure decreases to about 8 per cent by twenty-eight to thirty weeks and 7 per cent by thirty-four weeks; common experience

has long shown that this figure is reduced to about 3 per cent by term. We assumed, therefore, that there must be a positively acting force preventing the last 3 per cent of fetuses from undergoing spontaneous version from breech to cephalic presentation; we believed we encountered it in those cases in which we were unsuccessful in performing external version of a fetus presenting by the breech.

As a result of studies on the causal effect of central placenta previa and fundal implantation of the placenta on persistent, transverse or oblique presentation of the fetus in late pregnancy we studied the placental implantation site in patients with persistent breech presentation of single pregnancies at term and found the placenta to be implanted in the *cornual-fundal region of the uterus,* on one side or the other, in all of seventy-six cases. The determinations of placental implantation site in all cases were made with soft-tissue placentographic x-rays of the uterus, and by immediate intrauterine palpation of the placental implantation site in about one quarter of the cases. Since cornual-fundal implantation of the placenta has been found to occur in about 7.3 per cent of all pregnant women, regardless of fetal presentation, we believe that such placental implantation site is the principal cause of persistent breech presentation at term, and that its potency as a causal factor is decreased by increasing multiparity. Bicornate uterus, with the placenta implanted in one horn, is another cause of breech presentation.

Relation of Adrenal Cortex to Electrolyte and Water Metabolism

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It has long been realized that the adrenal cortex is essential in the control of water and electrolyte metabolism. When excess water is administered by mouth in varying amounts to normal animals and to animals deprived of both adrenal glands, there is a marked difference in the response; the former eliminating practically all of the water administered in a given period of time, while the latter shows a pronounced inability to excrete water at a noramal rate. This failure of adrenalectomized animals to diurese can be partially corrected with adequate hormone replacement.

Several theories have been advanced to explain this deficiency: (1) a delayed intestinal absorption of water; (2) renal failure;; (3) an imbalance between posterior pituitary antidiuretic hormone and adrenal cortical hormone; (4) extra-renal factors. Over the past few years, considerable data points to the fact that the relationship of posterior pituitary to adrenal is the controlling factor. However, this does not explain the protective action of cortical steroids against water intoxication, nor the inability to allow normal animals to diurese when the serum sodium and chloride are at low levels. Data from this laboratory would indicate that the level of sodium and chloride in the fluid compartments of normal and adrenalectomized animals is the essential factor not only in allowing normal diuresis to occur under water load but in preventing water intoxication.

It is conceivable that the primary role of the adrenal cortex is in the regulation of salt and water between fluid compartments and not necessarily a primary effect on kidney. Recent evidence that the liver of adrenalectomized animals is unable to inactivate pitressin supports the important relationship of liver-adrenal rather than adrenal-kidney. It has also been pointed out that the hormone of adrenal medulla also aids in the elimination of water, but the significance of this is still not well understood.

The Adrenal Cortex and the "Diseases of Adaptation"

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Two of the most significant contributions made by adrenocortical research to human medicine are the crystallization of the concept of the adaptation syndrome as an etiological factor in disease and the discovery of the therapeutic value of adrenocorticotropic (ACTH) and cortisone in certain inflammatory diseases. It is apparent that both of these developments are intimately related and complete understanding of the processes involved demands a more thorough knowledge of the action of adrenocortical steroids on fibro-elastic connective tissue.

Selye postulates that under stress the anterior hypophysis stimulates the adrenal cortex by its adrenocorticotropic hormone to secrete the C-11 non-oxygenated (desoxycorticosterone acetate (DCA) and the C-11 oxygenated hormones (cortisone). In stress the balance between these steroids is upset in favor of DCA which causes inflam-

matory reactions. Selye describes the successful induction of lesions resembling those found in human nephrosclerosis, periarteritis nodosum, arthritis and rheumatic fever by subjection of rats to stress, by treatment with lyophilized anterior pituitary preparations (LAP) or by DCA.

In collaboration with Dr. Dwight J. Ingle we have sought to confirm Selye's findings with LAP. No perioarteritis nodosum or arthritis has been observed. The renal and cardiac lesions were not completely typical of human nephrosclerosis or acute rheumatic fever, respectively. The difficulties involved in duplicating these experiments emphasize the diversity of the factors involved and the need for further research before the concept of the adaptation syndrome as a causative factor in disease may be accepted as established.

As for the mode of action of the sugar-active steroids in the treatment of these diseases, it has been postulated that they act as anti-inflammatory agents. The C-11 oxygenated steroids cause atrophy of fibroblasts and prevent their proliferation in the formation of granulation tissue. They induce atrophy of collagenous fibers and antagonize the depolymerizing action of hyaluronidase on the hyaluronic acid component of the ground substance. The effects observed might be due to the direct catabolic action of the hormones on protein, interference with vascularity or interference with the nutrition of cells due to modification of the ground substance in the tissue spaces.

The Relationship of the Adrenal Cortex to Homeostasis

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The secretory capacity of the adrenal cortices is very great and varies in response to changes in "need" during different degrees of stress. Under non-stress conditions, the sexually mature young male rat requires 3 to 5 c.c. daily of beef adrenal extract to fully sustain normality following adrenalectomy. When similar rats are subjected to the faradic stimulation of muscle (a severe stress), about 20 c.c. per twenty-four hours of beef adrenal extract is required to sustain normal work output. The adrenal cortices can be stimulated to secrete still greater amounts of hormones by the administration of exogenous ACTH. Normal rats given large doses of ACTH develop glycosuria. In order to induce glycosuria in normal rats by the administration of beef adrenal extract, daily amounts of not less than 50 c.c. were required.

During severe stress, some of the metabolic changes resemble those caused by the administration of large amounts of either cortical hormones or ACTH. It has been postulated that a number of the metabolic changes associated with stress are due to the increased secretion of cortical hormones. In some instances this seems to be true. The regression of lymphoid tissue and the reduction in blood lymphocytes and eosinophils during stress are apparently due primarily to the increased output of hormone by the adrenal glands. On the other hand the cortical hormones may be essential for the full manifestation of a metabolic response to stress although a change in secretory activity is not required. As an example, the rise in urinary non-protein nitrogen which characteristically follows a fracture is not manifest in the untreated adrenalectomized rat but does occur in similar animals treated with a constant intake of adrenal cortex extract. In these experiments, an increased output of cortical hormones was not a factor in stimulating catabolism—the adrenal cortices were absent.

Since an excess of the cortical steroids will intensify diabetes in the partially depancreatized rat and since it is known that any stress causes an increased secretion of cortical hormones, it might be anticipated that a stress would also intensify the glycosuria of mildly diabetic rats. On the contrary, the injection of toxic doses of formaldehyde into such animals caused some decrease in glycosuria. When these experiments were repeated on adrenalectomized-depancreatized rats in which the pre-adrenalectomy level of glycosuria was sustained by a constant intake of adrenal cortex extract, the administration of formaldehyde caused a still greater decrease in glycosuria. It was concluded that during this stress, the rats having intact adrenal cortices were better able to sustain homeostasis by increasing their output of cortical steroids in response to this increased need. Whereas, a similar increased output of cortical hormones in the absence of a "need" would exacerbate the diabetes, the response during stress simply prevents the cortical insufficiency that would otherwise ensue and tends to sustain homeostasis rather than to disturb it.

Editorial

PHYSICAL MEDICINE

PHYSICAL THERAPY, physiotherapy, hydrotherapy, vocational rehabilitation, body mechanics exercises are all physical medicine. They have long played a part in the prolonged treatment of orthopaedic and traumatic cases, but it is evident that all branches of medicine should avail themselves of this valuable adjunct to therapy.

The medical practitioner should understand what it is he is prescribing for his patient, and so direct it as he does any other therapy. The tendency to send the patient for "bake and massage" is not sufficient. The trained worker in physical medicine appreciates a description of the patient's condition, the type and frequency of treatment, and the possibility of exercises to be done at home. Convalescence from many conditions can be speeded by properly directed "postural exercises," and the value of these are apparent as contrasted to a half hours "bake and massage," with a twenty-three and a half hour wait for another passive "treatment."

Trained workers in physical medicine are becoming cognizant of their needs and are only awaiting our co-operation and direction in this very important field.

C. W. Brainard, M.D.

BACK DOOR APPROACH

OPPOSITION to the Wagner-Murray-Dingell Bills and other bills of that general character not only from the medical and health professions but from vast numbers of our fellow Americans has probably buried the danger from that frank legislative approach. However, the socializers in and out of government are not giving up the fight. There are numerous bills in Congress which propose a very small bite into the socialization process, but all of these nibbles put together spell State Socialism. They point directly to the nationalizing of the medical profession.

Physicians and their friends have worked so hard and have been so concerned about Wagner-Murray-Dingell that they forget other methods of approach. On June 20, Representative Biemiller (D., Wisc.), introduced H.R. 8886, "Federal Aid to Medical Education." This seems innocuous, and to some may seem to be a desired objective, but remember the Supreme Court ruled very recently that the federal government may regulate whatever it subsidizes. This looks like a subtle effort of the federal government to gain control of the medical schools through the Federal Security Agency. The bill contains "safeguarding" provision prohibiting "any direction, supervision, or control over, or any requirements with respect to the personnel, the curriculum, the instruction, the methods of instruction, or the materials of instruction, of any educational institution; or any direction, supervision, or control over or any requirements not expressly authorized by this part with respect to, the administration of any educational institution." This limitation, however, is completely null and void by action of the Supreme Court.

Another dangerous bill is S. 1411, the Medical School Health Services bill passed by the Senate, April 29, 1949, and now in the House. This contains a declaration of policy "The Congress hereby declares . . . that it shall be the national policy to provide assistance to the several States to enable them to improve health services for school children for the prevention, diagnosis, and treatment of physical and mental defects and conditions of school children." Whenever the federal government assumes the treatment of large groups of people this is Socialized Medicine. By this bill the Federal Security Administrator, now Oscar Ewing, would have control of the health program including treatment of all school children.

S. 2591 (H.R. 3945) is a bill for government support of medical research in certain diseases such as arthritis, rheumatism, multiple sclerosis, cerebral palsy, epilepsy, blindness and "other diseases." Its objective is the improvement of health "through the conduct of researches, investigations, experiments, and demonstrations relating to the cause, prevention, and methods of diagnosis and treatment." Again the government proposes to enter into the treatment of many diseased conditions and the "other diseases might include any diseased condition or all medical treatment." The fight

(Continued on Page 946)

The Danger Point!

The trend to big government since the turn of the century has been obvious. On every hand today we can see evidences of the broad scope of federal legislative action. Until recently, however, individual professions have merely been regulated for protection of the public under the police power of the states. Now the tendency is beyond protective regulation and toward confiscation of professional services for redistribution by government itself. This line of demarkation—between mere protective regulation on the one hand, and governmental quasi-employed status on the other—is the danger point!

It is imperative that all professional groups recognize that a domestic cold war has already been launched by proponents of the welfare state, and that it can be won or lost by direct legislative action before ever reaching the desirable level of public discussion. Only unified resistance to undesirable federal legislation at the present time can prevent eventual emasculation of the medical profession through socialization. Only definitive federal legislation or court decisions can protect our professional organizations from governmental persecution disguised with deliberate misinterpretation of federal anti-trust acts. At the state level, legislative action is the key to many steps most necessary for future professional progress. Only state legislative help can expand medical educational facilities sufficiently to meet today's shortage of doctors. Only state legislative fiat can give the medical profession the control over its own ethics so necessary for public protection. A comprehensive medical practice act in Michigan would resolve for the future much of the problem caused by presence of healing practitioners inadequately trained or representing practice theories of doubtful validity.

Every doctor today must possess some general knowledge of state and federal legislative programs and procedures, personal acquaintance with local legislative representatives, and a well informed attitude toward current events for his own protection. It is regrettable that government today is so highly influenced by pressure groups, but wishing will not make it otherwise. The professions cannot afford to maintain political lobbys similar to those of labor, industry, or the farm groups. But we can and must insure the enlightenment of such groups and our legislators with accurate medical-social information.

W. E. Barstow M.D.

President, Michigan State Medical Society

President's

Page

against National Socialism as related to medicine has only begun.

THE WRONG ROAD

MODERN civilization has been a process of evolution and in its later stages there has been rather persistently an effort to improve the condition of the individual, to relieve him from serfdom or the abasement of dictatorship.

In the 13th Century the Anglo-Saxon people established Magna Carta, and began enjoying a measure of emancipation. Modern advancement and the recognition of individual effort was accentuated by our American Declaration of Independence and Constitution. Full play to private enterprise has developed in America. The British were on a similar road but have been led astray by the effort of government to dominate individual initiative. The present state of Britain is far removed from the past and is a great contrast to the self reliance system which we recognize in America: but we are threatened with trends in America which can only lead to the same Socialism that has gripped the European Nations for a generation or more.

The political effort has been to guarantee security rather than independence. The socialism trend is spreading by slow and minor but significant degrees. It is a political move entirely foreign to the tradition of either of the great American national parties. The Democratic Party has always been a states right party, denying to the national government any function not specifically voted to it, and the Republican Party believed in national strength without denying individual responsibility. Our political leaders now, however, are building a policy featured on promises of security rather than promise of opportunity, and are securing votes necessary to election. Unfortunately, our people are being lead down the wrong road to a state of so-called "Social Security" which can only mean the loss of individual opportunity. As leaders in our communities, medical men must point out these dangers to our people and guard against following the wrong road.

"THE ROAD AHEAD"

THE DANGERS to our Nation and to our people as pointed out by the book, "The Road Ahead" by John T. Flynn, are gradually being appreciated by ever increasing numbers. Within the past six weeks one service club, with which we are familiar, has had three programs on this threat of socialism, and trend to collectivism.

The director of the personnel department of a great corporation told of the growing reliance on promises of a planned economy, and less evidence of the pioneering spirit which built this nation and a mode of life never before experienced. He based his talk somewhat on the book "Mainspring." "Down through the ages, most human beings have gone hungry and many have always starved . . . countless millions, struggling unsuccessfully to keep bare life in wretched bodies have died in misery and squallor. . . . Then suddenly, in one spot on this planet, people eat so abundantly that the pangs of hunger are forgotten." A picture of America today is given, then: "How did it happen? Three generations—grandfather to grandson —have created these wonders surpassing the utmost imaginings of all previous time." But now fearfully our people are abandoning the urge and initiative which wrought these miracles.

A newspaper publisher and editor, who years ago was a minister of the gospel, reviewed the book "The Road Ahead." Those who heard his talk, reported that his message was a masterpiece, and that after the book review the time was filled out with the editor's personal concept of the increasing dependence on government for every benefit and gave a glowing picture of socialism as it is developing here at home—not in some strange and foreign land.

Two days after our last Independence Day, Robert F. Weber, Michigan District Governor of Kiwanis, gave a wonderfully prepared message, "The Wrong Road." He told of "the factors in American society which promote the trend toward socialism: Class hatred, favoritism and a growing tendency to let the government do things for us are among the evils which must be corrected. . . . During the last war, we witnessed the growth of a monster government which gained control of prices, wages, and housing, and five years after the war's end refuses to surrender its power over the individual. . . . We have seen small farm relief laws develop into huge farm subsidies. We have seen the government enter the field of electric power, housing, and show definite signs of wishing to enter the fields of education and health insurance."

American Fabians!

The book, "The Road Ahead" tells of the gradual growth of socialism in Britain. In 1883, a small group of Socialists organized what they called the Fabian Society. In time it included Sidney Webb, Beatrice Webb, Annie Bezant, George Bernard Shaw, Ramsey MacDonald. The society abhored the term Socialism, but saw early "the immense value of social reform for accustoming the citizens to looking to the state for the correction of all their ills. . . . They saw that welfare agitation could be made the vehicle for importing socialist ideas into the minds of the common man." Flynn says there is not in America a counterpart of the British Fabian Society, but he mentions a number of organizations who are furthering a "Planned Economy."

The issue of the *Saturday Evening Post* for July 8, 1950, contains an article, "The Man the Doctors Hate" which may have the answer, and give us the tip-off of the American Fabian Society. Oscar R. Ewing, the Social Security Administrator, who wishes to become the first Secretary of Welfare Education and Health, was the guiding spirit of a group of Truman brain trusters who dined on Monday evenings at Ewing's Wardman Park Hotel Apartments from 1946 to 1949. They included Clark Clifford, later top White House counsel and speech writer; J. Donald Kingsley, White House assistant; C. Girard Davidson, Assistant Secretary of the Interior; Leon Keyserling, left-wing economic advisor to the President; Charles Brannan, Assistant, and later Secretary of Agriculture. This group are at least doing the work accomplished by the British Fabian Society.

The *Saturday Evening Post* is giving the cause of Americanism, and free enterprise a great boost by its exposure of Mr. Ewing. Please read this article.

TRAUMA AND CANCER

(Continued from Page 900)

answer can be found. Physicians can help by recording all known factors surrounding the effects of severe injuries in their records of such cases.

The foregoing discussion has been confined to the problem of acute trauma as exemplified by a single severe injury. The arguments do not apply to chronic or prolonged irritation or injuries to tissue which have long been recognized as of importance in the development of many cancers.

Detach, fill in bottom line, and display in office or on office door

Doctor Is Out

He is attending the 85th Annual Session of the Michigan State Medical Society at Detroit where he is hearing scientific lectures by the nation's leading scientists and viewing the latest medical and surgical techniques and equipment by movies and exhibits.

Doctor will be in his office.....

MSMS Registration Record Must Be Broken

Two years ago, a Michigan State Medical Society's Annual Session attendance record was made in Detroit when a total of 3,499 registered at the 83rd Annual Session.

Records are made to be broken —and with this thought in mind the Michigan State Medical Society is out to smash this registraton record at the meeting to be held this year in Detroit.

Book-Cadillac Hotel

Thanks to a splendid scientific program, and with plans for many social and convention activities for September 20, 21, 22, the Society feels certain that the 1950 attendance will surpass the splendid record of 1948.

The speaking program includes in the parade to the lectern such famous names as: Raymond W. McNealy, M.D., Chicago, Ill., Charles A. Doan, M.D., Columbus, Ohio, Wm. E. Chamberlain, M.D., Philadelphia, Pa., Earl W. Netherton, M.D., Cleveland, Ohio, Lee F. Hill, M.D., Des Moines, Iowa, George C. Prather, M.D., Brookline, Mass., Samuel A. Cosgrove, M.D., Jersey City, N. J., Harold W. Brown, M.D., New York, N. Y., and Harris B. Shumacker, Jr., M.D., Indianapolis, Ind.

Herbert F. Traut, M.D., San Francisco, Calif., Paul M. Moore, Jr., M.D., Cleveland, Ohio, Charles F. McKhann, M.D., Cleveland, Ohio, Vlado A. Getting, M.D., Boston, Mass., Antonio Rottino, M.D., New York, N. Y., William A. Altemeier, M.D., Cincinnati, Ohio, William F. Mengert, M.D., Dallas, Texas, John L. McKelvey, M.D., Minneapolis, Minn., and James T. Priestly, M.D., Rochester, Minn.

Frederick F. Yonkman, M.D., of Summit, N. J., William F. Reinhoff, Jr., M.D., Baltimore, Md., Louis A. Brunsting, M.D., Rochester, Minn., Priscilla White, M.D., Boston, Mass., Frederick A. Gibbs, M.D., Chicago, Ill., Wm. L. Bradford, M.D., Rochester, N. Y., John R. McDonald, M.D., Rochester, Minn., Warren H. Cole, M.D., Chicago, Ill., Edward L. Bortz, M.D., Philadelphia, Pa.

Ninety-Nine Exhibits

Something new will be featured in the exhibits this year. Leading manufacturers and medical-surgical dealers and service concerns will display the finest and newest of products, supplies and service. This display will interest and be of tangible value to the medical practitioner.

Officers Night—State Society Night

Wednesday evening, September 20, the public meeting will find Elmer L. Henderson, M.D., of Louisville, Ky., President of the AMA and the World Medical Association, sharing the speaking program with J. O. Christianson, D.Sc., Saint Paul, Minnesota, the Biddle Lecturer. The ladies of the Women's Auxiliary have made "Officers Night" part of their official convention schedule; that alone speaks for a successful meeting Wednesday evening.

The Women's Auxiliary will take over the Detroit Statler for their convention, beginning September 19. Top speaker will be Mrs. Arthur C. Herold, Shreveport, La., AMA Auxiliary President. The Auxiliary program is filled with meetings, breakfasts, luncheons, a banquet, all climaxed with the entertainment of State Society Night on September 21 which will feature a floor show and dancing for the enjoyment of MSMS members and their ladies.

Everything has been planned to break the MSMS registration record. All that remains is for *YOU,* doctor, to come to the Book-Cadillac Hotel, Detroit, and to take your share of the scientific and social banquet prepared with great care by your State Medical Society. Old friends—and new friends will make you welcome. Your experience will be both interesting and scientifically profitable to you.

Michigan State Medical Society

The 85th Annual Session and Postgraduate Conference

BOOK-CADILLAC HOTEL—DETROIT, MICHIGAN
SEPTEMBER 20-21-22, 1950

ANNUAL SESSION INFORMATION

DIRECTORY

Headquarters—Book-Cadillac Hotel, Detroit

Registration—Fifth Floor, Book-Cadillac Hotel

Assemblies—Grand Ballroom, Book-Cadillac Hotel

Exhibits—Fourth Floor, Book-Cadillac Hotel

Press Room—Parlor F, Fifth Floor, Book-Cadillac Hotel

Woman's Auxiliary Headquarters—Statler Hotel, Detroit

* * *

♦ **REGISTER—Fifth Floor, Book-Cadillac Hotel—as soon as you arrive.**

Hours: Tuesday, September 19—1:00 p.m. to 5:00 p.m.
Wednesday, September 20—7:30 to 5:00 p.m.
Thursday, September 21—8:30 to 5:00 p.m.
Friday, September 22—8:30 a.m. to 3:30 p.m.

NO REGISTRATION FEE FOR MSMS, AMA and CANADIAN MA MEMBERS.

Admission will be by badge only to all Scientific Assemblies and Section Meetings.

Bring your MSMS, AMA, or CMA Membership Card to expedite registration.

* * *

♦ **GUESTS**—Members of the American Medical Association from any state, or CMA members from any province of Canada, and physicians of the Army, Navy and U. S. Public Health Service are invited to attend, as guests. No registration fee. Please present credentials at the Registration Desk.

Bona fide doctors of medicine serving as interns, residents, or who are associate or probationary members of county medical societies, if vouched for by an MSMS Councilor or the president or secretary of a county medical society, will be registered as guests. Please present credentials at the Registration Desk.

* * *

♦ **MICHIGAN DOCTORS OF MEDICINE,** not members, if listed in the American Medical Directory, may register as guests upon payment of $5.00. This amount will be credited to them as dues in the Michigan State Medical Society **FOR THE BALANCE OF 1950 ONLY,** provided they subsequently are accepted as members by their County Medical Society.

* * *

♦ **DOCTORS,** register Tuesday! Registration of physicians will be held Tuesday afternoon from 1:00 to 5:00 p.m.—as well as on Wednesday, Thursday, Friday, during the 1950 MSMS Annual Session. The Tuesday afternoon registration hours are arranged so that physicians may avoid waiting in line Wednesday morning before the opening Assembly.

We recommend to Detroit physicians—and those who arrive in Detroit on Tuesday—that they register Tuesday, September 19, from 1:00 to 5:00 p.m., Fifth Floor, Book-Cadillac Hotel.

* * *

♦ **TELEPHONE SERVICE**—Special lines to handle local and long distance telephone service for registrants at the MSMS meeting will be installed on the Fourth Floor, near Grand Ballroom, Book-Cadillac Hotel. Call WOodward 1-8000.

* * *

♦ **CHECK ROOM**—Fourth Floor, Book-Cadillac Hotel.

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♦ **GUEST ESSAYISTS** are very respectfully requested not to change time of their lecture with another speaker without the approval of the Assembly. This request is made in order to avoid confusion and disappointment on the part of some members of the audience.

* * *

♦ **PUBLIC MEETING**—The evening Assembly of September 20—Officers Night—will be open to the public. Invite your patients and other lay friends to this entertaining meeting, to be held in the Grand Ballroom of the Book-Cadillac Hotel. Program on Page 956.

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♦ **THE UNIVERSITY OF MICHIGAN MEDICAL SCHOOL CENTENNIAL 1950**—will be fittingly commemorated Wednesday evening, September 20, when the Michigan State Medical Society Scroll of Appreciation will be presented by MSMS President W. E. Barstow, M.D., to representatives of the University of Michigan and of its School of Medicine. See Page 956.

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♦ **CABARET-STYLE DANCE AND ENTERTAINMENT,** with the compliments of the Michigan State Medical Society, will be held in the Grand Ballroom, Book-Cadillac Hotel, Thursday evening, September 21, at 10:30 p.m. All who register, and their ladies, will receive a card of admission and are cordially invited to attend.

* * *

♦ **"UBIQUITOUS HOSTS"**—The following Detroit doctors of medicine have placed themselves at the disposal of the twenty-eight visiting guest essayists who are on the program of the 85th Annual Session in Detroit; they will demonstrate the meaning of Michigan hospitality to the eminent speakers from other parts of the

United States: W. E. Barstow, M.D., M. A. Darling, M.D., I. G. Downer, M.D., H. B. Gaston, M.D., J. C. Gemeroy, M.D., W. S. Gonne, M.D., M. H. Hoffmann, M.D., J. A. Kasper, M.D., D. H. Kaump, M.D., E. G. Krieg, M.D., K. K. Latteier, M.D., G. C. Leckie, M.D., E. E. Martmer, M.D., R. E. McBroom, M.D., J. G. Molner, M.D., G. J. Moriarty, M.D., W. S. Nolting, M.D., L. A. Pratt, M.D., A. E. Schiller, M.D., L. W. Shaffer, M.D., Carl Shelton, M.D., E. D. Spalding, M.D., D. I. Sugar, M.D., R. G. Swanson, M.D., C. E. Umphrey, M.D., E. M. Vardon, M.D., M. L. Wells, M.D., A. H. Whittaker, M.D., E. A. Wishropp, M.D.

Sincere thanks are extended these hosts for their tangible help in making the MSMS Annual Session of 1950 an outstanding success.

* * *

♦ **TRANSPORTATION**—The C. & O. Streamliners afford a convenient means of transportation to the MSMS Annual Session in Detroit for hundreds of physicians in the central and western part of the State. Order reservations well in advance.

* * *

♦ **PARKING**—Do not park on Detroit's streets. Rates for inside parking, supplied us by three of the several garages written for this information, are as follows:

DAC Garage, 1754 Randolph St., opposite DAC, hourly rate 30c for first hour, 10c each additional hour; daily rate, $1.50; three-day rate, $4.50; weekly rate, $9.00. In and out privileges on the daily, three-day rate and weekly rate. Delivery to hotel.

Grand Circus Garage, Adams Ave. at Randolph, 5 hours, 80c; 10 hours, $1.05; 1 day (24 hours), $1.50; 1 week, $9.00 (includes in and out service any time, day or night). Delivery to hotel.

Book Tower Garage, Inc.—Daily rates 50c first hour, 10c each additional hour; minimum $2.00 for 24 hours; weekly rate $10.00.

* * *

♦ **THE ANNUAL COMMITTEE ORGANIZATION** luncheon, a meeting of the MSMS committee chairmen appointed by President-Elect C. E. Umphrey, M.D., Detroit, to serve during the year 1950-51, will be held on Thursday, September 21 in Suite 808 at 12:15 p.m.

* * *

♦ **TECHNICAL EXHIBITS**—Ninety-nine (99) Technical Exhibits will open daily at 8:30 a.m. and close at 5:30 p.m., except on Friday when the break-up is at 3:30 p.m. Frequent intermissions to view the exhibits have been arranged before, during, and after the Assemblies.

* * *

♦ **POSTGRADUATE CREDITS** are given to every MSMS member who attends the Annual Session.

* * *

♦ **INFORM YOUR NEWSPAPER EDITOR** that you are attending the Michigan State Medical Society Annual Session and Postgraduate Conference in Detroit on September 20-21-22.

SECTION MEETINGS—on Wednesday, Thursday, Friday, September 20-21-22—will begin with a subscription luncheon at 12:00 noon in the English Room (Mezzanine Floor) Book-Cadillac Hotel. This one-for-all luncheon will be quickly served so that all registrants may reach the various Section Meeting rooms by 1:00 p.m. See Section meeting programs, Pages 953, 957 and 961.

TWENTY DISCUSSION CONFERENCES

These quiz periods will be held Wednesday and Thursday, September 20-21, at 5:00 to 6:00 p.m. and on Friday, September 22, at 4:30 to 5:30 p.m. An opportunity to ask questions concerning the presentations of the guest essayists, or to discuss one of your interesting cases with them, will be provided.

WEDNESDAY: Discussion Conferences on Medicine, Gynecology and Obstetrics, Ophthalmology, Pediatrics. Radiology, Surgery, and Urology.

THURSDAY: Discussion Conferences on General Practice, Medicine, Gynecology and Obstetrics, Otolaryngology, Pediatrics, Public Health & Preventive Medicine, and Surgery.

FRIDAY: Discussion Conferences on Medicine, General Practice, Pathology, Pediatrics, Surgery, and Syphilology.

♦ **THE MSMS HOUSE OF DELEGATES** convenes Monday, September 18, at 10:00 a.m., English Room, Book-Cadillac Hotel; it will hold two meetings on Monday, September 18, at 10:00 a.m. and at 8:00 p.m.; also two meetings on Tuesday, September 19, at 10:00 a.m. and at 8:00 p.m. PRE-REGISTRATION OF DELEGATES WILL BE HELD SUNDAY, SEPTEMBER 17, FROM 8:00 TO 10:00 P.M. PLEASE REGISTER IN ADVANCE, TO SPARE YOURSELF STANDING IN LINE MONDAY MORNING.

* * *

♦ **C. E. UMPHREY, M.D.**, Detroit, is General Chairman of Arrangements for the 1950 MSMS Annual Session in Detroit.

* * *

♦ **INFORMATION OF PRACTICAL VALUE IN DAILY PRACTICE** will be found at the Michigan State Medical Society Annual Session. All subjects on the MSMS Annual Session Program are applicable to clinical medicine. They stress diagnosis and treatment, usable in everyday practice.

* * *

♦ **THE WAYNE COUNTY MEDICAL SOCIETY HOSPITALITY COMMITTEE MEMBERS** will be located in the lobby of the Book-Cadillac Hotel.

* * *

♦ **REGISTER AT EVERY BOOTH**—There is something of interest or education in the large exhibit of technical displays. Stop and show your appreciation of the exhibitors' support in helping to make successful the 1950 MSMS Convention.

PAPERS WILL BEGIN AND END ON TIME

Believing there is nothing which makes a scientific meeting more attractive than by-the-clock promptness and regularity, all meetings will open exactly on time, all speakers will be required to begin their papers exactly on time and to close exactly on time, in accordance with the schedule in the program. All who attend the meeting therefore, are requested to assist in attaining this end by noting the schedule carefully and being in attendance accordingly. Any member who arrives five minutes late to hear any particular paper will miss exactly five minutes of that paper!

♦ MEETINGS OF SPECIAL SOCIETIES, ALUMNI AND AUXILIARY GROUPS

1. **The Michigan Chapter of the American College of Chest Physicians** will hold a dinner and business meeting on Wednesday, September 20, Pan American Room, Book-Cadillac Hotel, at 7:15 p.m. Speakers on the program are: Oscar A. Sander, M.D., Milwaukee, Wisconsin, on "The Medical Aspects of Pneumoconiosis" and Mr. Ivan Sabourin, Montreal, Quebec, on "The Legal Aspects of Compensation in Pneumoconiosis."

   All members of the Michigan State Medical Society and particularly all industrial physicians are cordially invited to attend this meeting.

2. **The Wayne University College of Medicine Alumni Association** will hold an alumni banquet on Wednesday, September 20, in the English Room of the Book-Cadillac Hotel at 6:30 p.m. Tickets will be available at the registration desk. Alumni, their wives, and guests are cordially invited.

   The dinner will be preceded by a reception in the same room at 6 p.m. Alumni and their friends will be guests of the Medical Faculty at the reception. The banquet program will be dismissed in time for alumni to attend the MSMS Officers Night ceremonies in the Grand Ballroom of the Book-Cadillac Hotel.

   An alumni headquarters will be maintained at the Book-Cadillac Hotel during the Annual Session.

3. **The Michigan Pathological Society** will hold a meeting on Friday, September 22, Pan American Room, Book-Cadillac Hotel, 3:00 to 9:00 p.m., with dinner at 7:15 p.m. The program will consist of a seminar on "The Pathology of the Pituitary, Para-Thyroid, Islet Tissue of the Pancreas, and the Adrenal Glands," with John R. McDonald, M.D., Rochester, Minnesota, acting as Moderator. Following the scientific seminar, a business meeting will be held.

4. **The Michigan Diabetes Association** will have a dinner meeting on Thursday, September 21, 7:00 p.m., in Suite 808, Book-Cadillac Hotel, with election of officers and scientific program.

5. **The Detroit Branch American Urological Association will have a dinner and business meeting on** Tuesday, September 19, 6 p.m. University Club, Detroit.

6. **The Michigan Regional Committee on Trauma of the American College of Surgeons** will have a luncheon meeting on Thursday, September 21, in Suite 500, Book-Cadillac Hotel, 12:00 noon to 3:00 p.m. This will be the Committee's Annual Meeting with election of officers and local regional committee reports.

7. **The Loyola University Alumni Association** will hold a dinner meeting on Thursday, September 21, in the Pan American Room at the Book-Cadillac Hotel, 7:00 p.m. Wives of alumni are cordially invited.

8. **The Michigan Proctological Society** will hold a dinner meeting on Thursday, September 21, in the Founders Room, Book-Cadillac Hotel, at 7:00 p.m. William A. Altemeier, M.D., Cincinnati, Ohio, will speak on "The Role of Chemotherapy in Surgery of the Colon"; a round table discussion on "Rectal Fistula" will follow with L. J. Hirschman, M.D., Detroit, acting as Moderator.

9. **The Michigan Allergy Society** will meet for dinner at 7:00 p.m., Thursday, September 21, in Parlor H of the Book-Cadillac Hotel, Detroit. The program will consist of the following: 8:15 p.m.: business meeting with installation of new officers and remarks by the incoming President, Meryl Fenton, M.D., Detroit; 8:30 p.m.: scientific program as follows: Round Table discussion on use of ACTH and Cortisone. Moderator: Joseph H. Shaffer, M.D., Physician in Charge, Allergy Section, Dept. of Medicine, Henry Ford Hospital, Detroit.

10. **The Alpha Kappa Kappa Fraternity** will hold a dinner meeting at the Detroit Athletic Club on Thursday, September 21, at 5:30 p.m. Registration will be at the Medical Arts Surgical Supply Company's booth (No. 91).

11. **The Michigan State Medical Assistants Society** will meet at the Detroit Leland Hotel, Detroit, on Wednesday and Thursday, September 20-21 with registration beginning Wednesday at 9:00 a.m. A tour of Michigan Medical Service will be held at 3:30 p.m. followed by a view of the Michigan State Medical Society exhibits at 4:30 p.m. The Annual Dinner will be held at the Detroit Leland Wednesday, September 20, at 7:00 p.m. with Mary Louise Goodson of the John Powers School of Charm speaking on "Modern Charm." The M.M.A.S. general meeting is scheduled at the Detroit Leland on Thursday, September 21, at 2:30 p.m.

12. **The Michigan Orthopedic Association** will hold a meeting on Saturday, September 23, 1950, the day following the MSMS Annual Session, Book-Cadillac Hotel, Detroit, in the Founders Room, beginning at 9:00 a.m. and ending at 12:00 noon. For information and program contact C. Leslie Mitchell, M.D., 2799 W. Grand Blvd., Detroit, President, M.O.A.

13. **The Michigan Society of Neurology and Psychiatry** will meet in the English Room, Book-Cadillac Hotel on Friday, September 22, 6:30 p.m. dinner. Francis J. Braceland, M.D., Rochester, Minnesota, will speak on "Psychiatry for the General Practitioner."

14. The members of the **Michigan Branch of the American Academy of Pediatrics** will meet with the MSMS Section on Pediatrics, Thursday, September 21, 12:15 p.m. After luncheon in the English Room, the meeting will be held in the Pan American Room, Book-Cadillac Hotel. Frank Van Schoick, M.D., Jackson, is State Chairman and Edward A. Wishropp, M.D., of Detroit is the Detroit District Chairman.

15. **The Anesthetists** will meet at a Section luncheon on Friday, September 22, 12:15 p.m., Suite 500, Book-Cadillac Hotel, Detroit. See program on Page 961.

    The Michigan Society of Anesthesiologists will hold its annual dinner meeting at Harmony Club, Detroit, Thursday, September 28, at 6:30 p.m.

16. **The Academy of General Practice of Michigan** will meet for dinner on Wednesday, September 20, Esquire Room, Book-Cadillac Hotel, Detroit, 7:00 p.m. Parke, Davis & Co., Detroit, will be host.

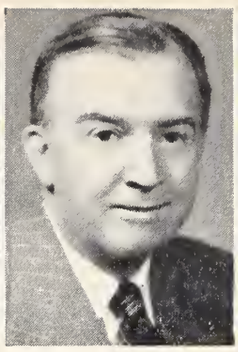
(Continued on Page 988)

THE WOMAN'S AUXILIARY TO THE MICHIGAN STATE MEDICAL SOCIETY will present an attractive social and business program at the Statler Hotel, Detroit, to which the wife of every MSMS, AMA and CMA member is cordially invited. For Program, see Page 816, July issue.

Guest Speakers

W. A. Altemeier

E. L. Bortz



Wm. L. Bradford

H. W. Brown

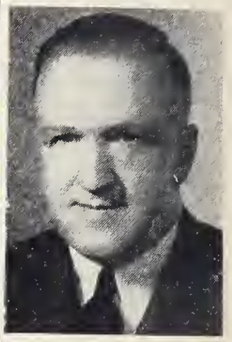
L. A. Brunsting

W. E. Chamberlain

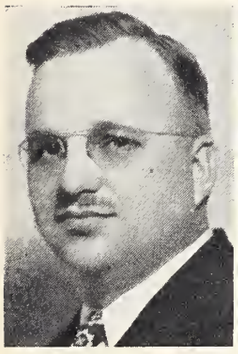
J. O. Christianson

Warren H. Cole

S. A. Cosgrove



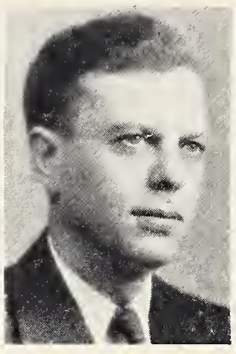
Charles A. Doan



V. A. Getting

Frederick A. Gibbs

Lee F. Hill



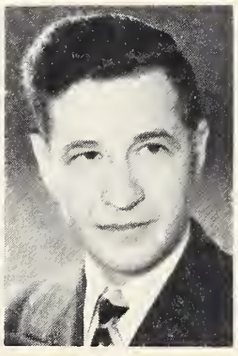
John R. McDonald

John L. McKelvey

Chas. F. McKhann

R. W. McNealy

W. F. Mengert



P. M. Moore

E. W. Netherton

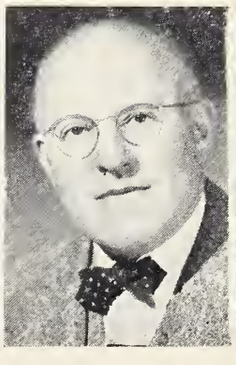
Geo. C. Prather

J. T. Priestley

W. F. Rienhoff, Jr.

Antonio Rottino

H. B. Shumacker, Jr.



Herbert F. Traut

Priscilla White

F. F. Yonkman

Michigan State Medical Society
The 85th Annual Session and Postgraduate Conference

PROGRAM OF GENERAL ASSEMBLIES AND SECTIONS

WEDNESDAY MORNING
September 20, 1950

First Assembly

Grand Ballroom, Book-Cadillac Hotel

Chairman: H. B. Zemmer, M.D., Lapeer

Secretary: L. C. Carpenter, M.D., Grand Rapids

A.M.

9:00 "Parotid Gland Tumors"

Raymond W. McNealy, M.D., Chicago, Illinois
Chief Surgeon, Wesley Memorial Hospital; Associate Professor of Surgery, Northwestern University Medical School; Professor of Surgery, Cook County Graduate School of Medicine; President Staff, Cook County Hospital; Secretary ond Treasurer, Cook County Graduate School of Medicine.

John W. McCallister, M.D., Chicago, Illinois (co-author)

Clarification of the exact surgical anatomy and pathology of the parotid gland seems to have lagged behind professional knowledge of other organs accessible to surgical treatment. As a result of incorrect or misleading information, the treatment of tumors of the parotid gland has in many instances been inadequate. Neoplasms of this gland may remain completely curable for a decade or more. Yet, because of misconceptions concerning their malignant nature and proper treatment, many are allowed to pass into gross and incurable malignancy.

9:30 "The Leukemic States: Their Differentiation and Specific Management"

Charles A. Doan, M.D., Columbus, Ohio
Dean, College of Medicine, Professor of Medicine, and Director of Medical Research, The Ohio State University.

The leukemias must be, first of all, differentiated from the pseudo-leukemic and polycythemic syndromes. They then may be classified clinically as acute, sub-acute and chronic, and each of the three major types is now approached from the standpoint of treatment, according to the cell type, and whether the basic mechanism is one of maturation arrest in the developmental cycle, or whether it is a true malignant cell mutation or change. At one extreme are the very chronic leukemias which may be successfully treated indefinitely with present methods. At the other extreme are the acute sarcomas which may be temporarily arrested with the newer therapeutic agents now available. Differentiation of the various leukemic states and their respective responses to different methods of management will be discussed in detail.

10:00 INTERMISSION TO VIEW EXHIBITS—Always Something New

11:00 "Newer Developments in Atomic Medicine"

W. Edward Chamberlain, M.D., Philadelphia, Pennsylvania
Professor of Radiology, Temple University Medical School; Director, Department of Radiology, Temple University Hospital.

11:30 "The Common Geriatric Dermatoses"

Earl W. Netherton, M.D., Cleveland, Ohio
Professor of Dermatology; Frank E. Bunts Educational Institute; Chief, Department of Dermatology, Cleveland Clinic.

Benefits of preventative medicine, the advent of antibiotics and other miracle drugs, as well as other important scientific discoveries, have greatly increased the longevity of the human race. This progress has produced a gradual increase in the per cent of the population over 60 years of age. Since the physician is more often confronted with the complex problems of biologic aging, his interest in diseases of this age group has increased.

Certain dermatoses occur more often in individuals during the 6th to 9th decades of life, while other common diseases of the skin may be more chronic and respond less favorably to treatment when they occur in an elderly person. Concomitant metabolic disturbances, nutritional deficiencies, arteriosclerosis, cardio-renal disease, and so forth, may alter the clinical course of dermatoses of this age group.

Among the common dermatoses discussed are cutaneous malignancies, senile and sebaceous keratosis, senile sebaceous adenoma and angioma, common types of dermatitis (eczema group) and senile pruritus.

12:00 End of First Assembly

Program of Sections

WEDNESDAY NOON
September 20, 1950

12:15 p.m. to 1:30 p.m.

Subscription luncheon for all who attend Section Meetings—English Room

SECTION ON DERMATOLOGY AND SYPHILOLOGY

Pan American Room

Chairman: R. H. Holmes, M.D., Muskegon

Secretary: J. R. Delaney, M.D., Detroit

"Periarteritis Nodosa." (Unexplained Fever with Angiitis and Cutaneous Lesions)

Earl W. Netherton, M.D., Cleveland, Ohio

Persistent fever of obscure origin constitutes one of the most complex problems of clinical medicine. Cutaneous lesions may occur. After exhaustive investigation some cases cannot be classified satisfactorily; however, in others a clinical diagnosis of periarteritis nodosa seems to be tenable.

Examples of this symptom complex which have been observed at the Cleveland Clinic in recent years will be discussed.

SECTION ON RADIOLOGY

Founders Room

Vice-Chairman: J. E. Lofstrom, M.D., Detroit

"Some Harmful Effects of Irradiation and Their Avoidance"

W. Edward Chamberlain, M.D., Philadelphia, Pennsylvania

Irradiation is a two-edged sword. Correctly applied in a properly selected case its potentialities for good may be boundless; its potentialities for harm must, however, be borne in mind at all times. When irradiation is applied in the treatment of a benign condition, resultant harm to normal structures will not be acceptable.

Cases will be presented in which harm resulted from (a) a single exposure, (b) a series of relatively minute exposures. There will be emphasis upon the significance of the interval between small exposures and evidence will be produced to indicate that great caution is necessary in the use of irradiation for such conditions as acne, epidermophytosis, psoriasis, and the common wart.

SECTION ON UROLOGY

Parlors G-H-I

Chairman: G. E. Chittenden, M.D., Detroit

Secretary: William Bromme, M.D., Detroit

"Urological Aspects of Spinal Cord Injury"

George C. Prather, M.D., Brookline, Massachusetts

Following spinal cord injury the objective of the urologist is first to care for the paralyzed bladder in a manner which will avoid serious urinary infection and preserve renal integrity and second to ultimately provide a bladder which will function in the best manner consistent with the level and extent of the injury.

Immediately following spinal cord injury when "spinal shock" is evident the bladder is not capable of emptying itself so that provision for drainage must be made. Intermittent catheterization is acknowledged as the worst form of treatment. Constant drainage with a number 16 F. balloon type urethral catheter in which a sterile closed system of irrigation is employed represents the best treatment to-day. Automatic or manual irrigation is optional.

Frequent cystometric studies will be needed to observe changes in bladder activity and to indicate a time proper for the beginning of bladder training. When sufficient reflex activity for effective voiding can be demonstrated in the cystometrogram, a trial should be made without the catheter in the hope of eventually obtaining a bladder which will efficiently empty itself by command or on a satisfactory time schedule.

The co-operation of the neurosurgeon, nutritionist and orthopedic surgeon will be necessary for the optimum recovery and ambulation.

SECTION ON GYNECOLOGY AND OBSTETRICS

Grand Ballroom

Chairman: H. H. Lampman, M.D., Detroit

Secretary: P. E. Sutton, M.D., Royal Oak

"Report of Experience with Pitocin by Intravenous Route"

Samuel A. Cosgrove, M.D., Jersey City, N. J.

The use of pitocin or other extracts of the posterior pituitary gland of animals for augmenting the forces of labor during the first and second stages has been exhaustively exploited for a period of about forty years since the introduction of those products in commercially available forms. Much tragedy resulted from the incautious exploitation of this means of management by crude preparations and by excessive dosage, so that the whole profession presently became very chary of the use of these agents for such purpose. Two years ago Eastman reported very cautiously on the use of pitocin, one of such products, by intravenous administration in great dilution. This method has since then been used in a number of clinics. In addition, it has been widely used in the induction of premature labor in toxemics and for other indications. In the Margaret Hague Maternity Hospital we are able to report several hundred cases of its application for these purposes. We have also used it in a few cases to expedite the expulsion of secundines in abortion. Our results are presented and analyzed. While they have on the whole been good, it must be emphasized that this presentation is but a progress report on a procedure which we do not yet believe has been thoroughly evaluated.

SECTION ON OPHTHALMOLOGY

Suite 808

Chairman: J. C. Gemeroy, M.D., Detroit

Secretary: F. B. Heckert, M.D., Lansing

"Congenital Paralysis of the Inferior Oblique"

Harold W. Brown, M.D., New York, New York

Congenital paralysis of the inferior oblique is the rarest of any of the isolated ocular muscle insufficiencies.

A study of eleven such cases to be illustrated in detail, revealed a structural anomaly in nine that has not been previously described in the literature. All eleven cases showed a complete paralysis of one or both inferior obliques as evidenced by a failure to obtain voluntary elevation up to or above the horizontal plane with the affected eye in the fully adducted position. In nine of the cases, elevation was thus limited even by manual methods as fixation forceps at operation or preoperatively under a local anesthesia. Both the voluntary and manual elevation increased as the eye moved toward the primary position with full elevation when the eye reached the mid line position.

The restriction to manual elevation proved to be due to a congenitally short anterior sheath of the homolateral superior oblique. In five of the cases that were operated on, the superior oblique was exposed (as the movies will demonstrate), the sheath dissected free from the tendon and cut transversely. This procedure resulted in free manual elevation in the previously restricted field.

The tendon sheath of the superior oblique (as will be illustrated) normally acts as a check ligament for the inferior oblique. Anatomically it has a fixed attachment to the pully and periosteum in this region and at the insertion of the superior oblique. As the insertion of the superior oblique is posterior to the center of rotation of the eye ball, the distance between it and the pulley will increase as the eye is adducted or elevated and decrease as the eye is abducted or depressed.

The following clinical characteristics seem to warrant the name of superior oblique tendon sheath syndrome to this type of congenital inferior oblique paralysis.

1. Complete paralysis of the inferior oblique as evidenced by failure of elevation of the eye to the horizontal plane, with the eye in full adduction.

2. Little if any secondary contracture of the direct antagonist (superior oblique).

3. As the eye is abducted, the limit of elevation will follow a straight line from the inner canthus to normal limits of elevation in the mid line.

4. The affected eye in the temporal field will show a near normal muscle balance.

5. There is usually a widening of the palpebral fissure on adduction.

WEDNESDAY AFTERNOON
September 20, 1950

Second Assembly

Grand Ballroom, Book-Cadillac Hotel

Chairman: E. A. Oakes, M.D., Manistee

Secretary: P. E. Sutton, M.D., Royal Oak

P.M.

1:30 "Preventive Pediatrics—Behaviour Aspects"

Lee F. Hill, M.D., DesMoines, Iowa

Chief of Pediatric Staff of Raymond Blank Memorial Hospital for Children.

Pediatricians in private practice spend slightly more than half of their time in the care of well children, while general practitioners spend approximately twenty-five per cent. It may be expected that this phase of practice in the future will increase as the care of ill children consumes less time due to the efficiency of the new chemicials and antibiotics.

Parental guidance in the mental health aspects of child behavior constitutes an important part of the routine preventive examination. To be effective parental advisors, physicians need to be familiar with normal growth and development in the various age periods.

The second year is especially important in the establishment of desirable behavior attitudes. It is during this period that the basis for later "problems" in eating, elimination, sleeping, and other emotional maladjustments frequently takes place. Anticipating for parents and interpreting to them the kind of behavior expected in the developing child is productive of better parental-child relationship and a source of greater satisfaction to parents in the rearing of their children. General practitioners and pediatricians constitute the first line of defense in the prevention of behavior problems in children. Deep-seated emotional conflicts require the services of the child-guidance clinic or the child psychiatrist.

2:00 "The Effect of Pregnancy on the Urinary Tract"

George C. Prather, M.D., Brookline, Massachusetts

Urologist—Boston Lying in Hospital; Surgeon in Chief for Urology—Boston City Hospital.

Pregnancy, a self limited condition, produces conspicuous anatomical changes in the kidneys and ureters of some women. Physiological, in contrast to pathological variations are most commonly manifested by hydronephroses and hydroureters which maintain a characteristic pattern as seen in pyelographic studies. These changes are believed to be caused in part by hormonal factors allied with the pregnancy and in part by the mechanical effects of the enlarged uterus.

In view of the anatomical changes in the kidneys of many pregnant women, infections, calculi, and congenital anomalies may produce disease which must be considered in a different light than when observed in the non-pregnant patient.

In order to avoid errors in the diagnosis and treatment of renal disorders during pregnancy one should be familiar with the pyelographic patterns as seen during the three trimeters of normal pregnancies and be aware of the present success or failure in the treatment of urological complications during pregnancy.

Fortunately, the effective drugs available today for the treatment of urinary infections have been helpful in pyelonephritis during pregnancy but one must stress the value of intravenous pyelography to distinguish between the normal and the abnormal anatomical changes in the kidneys.

Continued observations of the urinary sediment of catheterized specimens are essential during the pregnancy and following delivery if the patient is to receive the best medical advice during the current pregnancy and the best protection in future pregnancies.

2:30 "Overcoming Hemorrhagic Mortality"

Samuel A. Cosgrove, M.D., Jersey City, New Jersey

Clinical Professor of Obstetrics, Faculty of Medicine, Columbia University; Medical Director, Margaret Hague Maternity Hospital, Jersey City, N. J.

Throughout medical history the loss of women's lives in childbirth has been caused by three principal factors, namely, sepsis, toxemia and hemorrhage. Until less than a century ago the factor of sepsis caused more deaths than either of the other factors named. A generation ago the three ran more or less neck and neck, with sepsis and toxemia predominating. Each of these last two have been very much lessened by improvements in practice and management of pregnant women and of labor, but there has not been generally speaking as much decrease in the loss of life from hemorrhage. Hemorrhage therefore at the present time probably stands forth as the most frequent killer of women incident to childbirth. These shifting trends are illustrated by a few simple graphs. But it has now been made possible by further improvements in management and facilities of large organized clinics, to almost completely eliminate the necessity for women dying of parturient hemorrhage. The experience of one such clinic is offered as exemplifying this possibility. The implications of the possibility of extending this potentiality to other less highly organized fields of practice are discussed.

3:00 INTERMISSION TO VIEW EXHIBITS—An Amazing Display

4:00 "Management of Strabismus in Children"

Harold W. Brown, M.D., New York, New York

Clinical Professor of Ophthalmology, New York Postgraduate Medical School and Hospital; Director of Myology, Brooklyn Eye and Ear Hospital; Consulting Ophthalmologist, St. Clare's Hospital, New York City; Consultant Surgeon in Ophthalmology, New York Ear and Eye Infirmary.

The successful management of strabismus in children is, in a large measure, dependent on the intelligent cooperation of the medical profession as a whole and the general practitioner and pediatrician in particular. It is usually the advice of the medical confidant of the family that determines when, how and by whom the corrective treatment of a strabismic child is done.

An awareness of the handicap of strabismus, some idea of its etiology and an understanding of the basic principles of its treatment is necessary to intelligently advise and direct the parents of these patients.

The cosmetic defect of a squint will profoundly affect both the behavior and the psychological development of the child and in cases where there is a marked impairment of vision in one eye, a handicap in occupations that require good vision in both eyes will be added.

The etiology of strabismus in children varies and in many cases is unknown. In general they are either congenital, acquired or mixed, showing both acquired and congenital factors. In the first group, such congenital anomalies as aplasia of the extraocular muscles or nerves, birth injuries to these structures, or anomalies of the insertion or origin, may be the cause of the strabismus. The acquired group are largely due to refractive anomalies or acquired paralysis of the ocular muscles or nerves from systemic disease or trauma. The largest is the mixed group that shows evidence of both congenital and acquired etiological factors.

Treatment will depend on an accurate diagnosis and evaluation of each individual case. To treat amblyopia successfully, it must be started early (before school age). Treatment by glasses, orthoptics, et cetera, if unsuccessful in a reasonable length of time, should be changed or supplemented by other corrective measures, usually surgery.

4:30 "Aneurysms and Arterio-Venous Fistulas"

Harris B. Shumacker, Jr., M.D., Indianapolis, Indiana

Professor of Surgery and Chairman Department of Surgery, Indiana University Medical Center.

Aneurysms and arteriovenous fistulas arise as the result of injury or disease of arteries. Though more effective initial treatment is apparently reducing the incidence of syphilitic aneurysms, the injuries of industry and recurrent warfare and the degenerative arterial diseases—more prevalent as the life span of man increases—make the problem of recognition and management of aneurysms and fistulas an important one. Active treatment is indicated in these conditions because spontaneous cure is so uncommon and because harmful effects are so likely to ensue. Aneurysms may give rise to pain, to altered function as a result of compression of adjacent structures and may rupture with a disastrous outcome. Arteriovenous fistulas may produce general systemic alterations of considerable magnitude, especially as the result of increasing the work load of the heart. These changes will be discussed both from the standpoint of clinical observations and experimental studies.

In treating surgically these lesions of blood vessels it is important to make every effort to be sure that the collateral circulation is adequate. Methods for testing the efficacy of the collateral circulation are discussed as well as the usefulness of such measures as sympathetic denervation in attempting to bring about improvement in collateral blood flow. The important principles of operative treatment are outlined and emphasis is placed upon efforts to conserve blood flow through the affected artery whenever this is possible. The results of wiring of aneurysms justify use of this form of treatment when surgical ablation is not possible.

5:00 End of Second Assembly

4:00 Discussion Conference on Medicine.

5:00 Discussion Conferences on Gynecology and Obstetrics, Ophthalmology, Pediatrics, Radiology, Surgery, and Urology.
(See page 958).

WEDNESDAY EVENING
September 20, 1950

General Meeting

Grand Ballroom, Book-Cadillac Hotel

President: W. E. Barstow, M.D., St. Louis
Secretary: L. Fernald Foster, M.D., Bay City

P.M.
8:30 OFFICERS' NIGHT—PUBLIC MEETING

1. Call to order, and announcements and reports of the House of Delegates, by L. Fernald Foster, M.D.
2. Introduction of President W. E. Barstow, M.D., followed by President's Annual Address.
3. Induction of members into the MSMS "Fifty-Year Club" by President W. E. Barstow, M.D.
4. Presentation of Scroll of Appreciation by President Barstow to President Alexander G. Ruthven and Dean A. C. Furstenberg, M.D., of the University of Michigan in commemoration of the Centenary of the University of Michigan Medical School.
   Response.
5. Presentation of Scroll of Appreciation by President Barstow to Elmer L. Henderson, M.D., Louisville, Kentucky, President of the American Medical Association and the World Medical Association.
   Response.
6. Introduction of President-Elect C. E. Umphrey, M.D., Detroit, and induction of Dr. Umphrey into office of President of the Michigan State Medical Society by the Retiring President.
   Response of Dr. Umphrey.
7. Introduction of the new President-Elect and other newly elected Officers and of the Chairman of The Council, O. O. Beck, M.D., Birmingham.
8. Presentation of scroll and Past President's Key to Retiring President Dr. Barstow by the Chairman of The Council, Dr. Beck.

9:15 9. The Andrew P. Biddle Lecture.
"Rediscovering America" (30 minutes)

"J. O. Christianson, D.Sc., L.H.D., St. Paul, Minnesota
Superintendent, University of Minnesota School of Agriculture; Director of Agricultural Short Courses

Andrew P. Biddle, M.D.
Patron of Postgraduate
Medical Education
(Deceased August 2, 1944)

10. Presentation of Biddle Lecture scroll.

10:00 11. Adjournment

THURSDAY MORNING
September 21, 1950

Third Assembly

Grand Ballroom, Book-Cadillac Hotel

Chairman: R. H. Baker, M.D., Pontiac
Secretary: O. K. Engelke, M.D., Ann Arbor

A.M.
9:00 "Ovarian Cystomata"

Herbert F. Traut, M.D., San Francisco, California

Professor of Obstetrics and Gynecology, University of California Medical School; Obstetrician and Gynecologist in Chief, University of California Hospital; Consultant in Obstetrics and Gynecology, San Francisco County Hospital, Laguna Honda Home and Langley Porter Clinic.

There are a number of things about the life history of various common ovarian tumors which are not adequately understood by most practitioners of medicine. At least certain ovarian neoplasms are mistreated because of what seems to be a lack of understanding.

The first of these is the small benign ovarian cyst which is, I suppose, sinned against by the general surgeon more than any other clinical entity, unless it be the normal appendix—the difference here being, of course, that removal of a normal appendix is not without some benefit to the patient, whereas removal of a normal gonad is hard to justify. We shall attempt to outline the difference in the life history of the various benign ovarian tumors, and indicate means whereby they may be differentiated at the operating table.

Endometriosis is a serious gynecological disease complicating the reproductive period of many women, and of course is a progressive lesion under most circumstances. However, its presence does not necessarily indicate operative removal. We have means of treating the lesion medically, and also there is a very definite rationale which should guide us in our attitude toward this clinical entity. We shall attempt to elucidate the most recent thinking in this area.

Common cancers of the ovary arise from the papillary cystadenomata. What should our attitude as physicians be toward this clinical entity? How is the diagnosis made? What are the indications for treatment and therapy? We shall attempt to answer these questions in some detail.

9:30 "Lesions of the Mouth"

PAUL M. MOORE, JR., M.D., Cleveland, Ohio

Assistant Surgeon, Department Otorhinolaryngology, St. Luke's Hospital, Cleveland, St. Vincent's Charity Hospital and Huron Road Hospital, Cleveland.

The mouth may be the site of a great variety of lesions. Many of them are due to general conditions, and may be presented only in the mouth for quite some time. Their recognition may lead to an early diagnosis of a general diseased condition.

To make a correct diagnosis it may be necessary to do complete physical examination, blood sugar, serology, thorough blood studies, cultures, smears and biopsy.

Chemical poisoning by a variety of chemicals and drugs may produce characteristic lesions in the mouth. The heavy metals, like lead and arsenic, give a discoloration along the gum margins.

Vitamin deficiencies produce changes in the tongue, gums, lips and corners of the mouth.

Blood dyscrasias likewise affect the tongue and gums.

Many dermatological diseases may show themselves only in the mouth for quite a long time—erythema multiforme, pemphigus, and lichen planus.

Most of the infections known may appear in the mouth. Many of these produce characteristic lesions.

Any of the neoplasms may be found.

10:00 INTERMISSION TO VIEW EXHIBITS—Something To Interest You

11:00 "Cerebral Birth Injury in Retrospect"

CHARLES F. MCKHANN, M.D., Cleveland, Ohio

Professor of Pediatrics, Western Reserve University School of Medicine; Director of Pediatrics, Babies and Childrens Hospital of University Hospitals, Cleveland, Ohio.

As surgical and medical procedures come under evaluation in therapy of children with mental retardation, convulsive disorders, cerebral spasticity, and behavior problems, the selection of patients for various types of treatment may depend on the etiology of the child's condition. Less benefit should be expected on theoretical grounds for children with congenital cerebral defects or developmental abnormalities of their brains than in those children entirely normal up to the time of cerebral injury either from trauma, anoxia, or infection. Hence, the necessity of better means of determining causative factors in cerebral disturbances. We have reviewed a series of cases seeking to determine the incidence of birth injuries as a cause of late cerebral disorders. The evidence suggests that birth injuries may be a major factor in their causation. Studied in retrospect, the evidence does not distinguish between cerebral birth injuries due to anoxia and those due to direct trauma.

Behavior disorders in children without retardation, spasticity, or convulsions appear to be possible sequelae of milder degrees of cerebral injury at birth. The data suggest that at least one out of five birth injuries may have been due to preventable cause.

11:30 "The Doctor's Responsibility in Atomic Diseases"

VLADO A. GETTING, M.D., Boston, Massachusetts

Commissioner, Massachusetts Department of Public Health.

12:00 End of Third Assembly
INTERMISSION TO VIEW EXHIBITS

—— Program of Sections ——

THURSDAY NOON
September 21, 1950

12:15 p.m. to 1:30 p.m.
Subscription luncheon for all who attend Section Meetings—English Room

SECTION ON PEDIATRICS
Pan American Room

Chairman: E. H. WATSON, M.D., Ann Arbor
Secretary: R. J. MASON, M.D., Birmingham

"A Reappraisal of Carotoid-Jugular Anastomosis in Children with Mental Retardation, Cerebral Spasticity and Convulsive Disorders"

CHARLES F. MCKHANN, M.D., Cleveland, Ohio

Two hundred fifty children have been subjected to carotid-jugular anastomosis and the results studied over a period varying from two years to a minimum of four months. Benefit was obtained in approximately one out of three children. Untoward results required the operation to be revised, or the anastomosis closed off, in about ten per cent of cases.

The problems related to the procedure continue to be: (1) whether the benefit will persist, (2) to what extent revision or severance of the anastomosis will be necessary after a lapse of time, and (3) how best to select the case that will be benefited in order that only those will be subjected to the procedure in whom it holds some promise of success.

SECTION ON SURGERY
Grand Ballroom

Chairman: H. K. RANSOM, M.D., Ann Arbor
Secretary: L. C. CARPENTER, M.D., Grand Rapids

"Pancreatitis"

JAMES T. PRIESTLEY, M.D., Rochester, Minnesota

SECTION ON OTOLARYNGOLOGY
Founders Room

Chairman: J. E. CROUSHORE, M.D., Detroit
Secretary: R. W. TEED, M.D., Ann Arbor

"Cysts and Fistulas of the Face and Neck"

PAUL M. MOORE, JR., M.D., Cleveland, Ohio

The majority of these cysts and fistulas are of developmental origin. The embryology of the region will be reviewed briefly. The development, diagnosis and treatment of the following conditions will be discussed:

Fistula auris congenita.
Sebaceous cyst.
Epidermoid cyst.
Dermoid cyst.
Alveolonasal cyst.
Cystic hygroma.
Mucous cyst.
Ranula.
Thyroglossal cyst.
Branchiogenic cyst and fistula.
Laryngocele.
Meningocele.

SECTION ON PUBLIC HEALTH AND PREVENTIVE MEDICINE
Parlors G-H-I

Chairman: O. D. STRYKER, M.D., Mt. Clemens
Secretary: O. K. ENGELKE, M.D., Ann Arbor

"Mass Screening or the Multiphasic Clinic"

VLADO A. GETTING, M.D., Boston, Massachusetts

Twenty Discussion Conferences (Quiz Periods)

All Meetings in the Book-Cadillac Hotel, Detroit

Twenty Discussion Conferences each with a different chairman — a leader of outstanding ability in his field — will be held Wednesday, Thursday, Friday afternoons, immediately following the end of the Assembly program for the day. Here is your chance to ask questions of the lecturers and to hear discussed medical matters of value to you in your daily practice.

WEDNESDAY, SEPTEMBER 20, 1950
4:00 to 5:00 p.m.; 5:00 to 6:00 p.m.

4:00 to 5:00 p.m.*
MEDICINE
Esquire Room
Leader
H. M. Pollard, M.D.
Ann Arbor
Guest Conferee
C. A. Doan, M.D.
Columbus, Ohio

GYNECOLOGY AND OBSTETRICS
Pan American Room
Leader
R. B. Baer, M.D.
Detroit
Guest Conferee
S. A. Cosgrove, M.D.
Jersey City, N. J.

OPHTHALMOLOGY
Suite 808
Leader
F. B. Heckert, M.D.
Lansing
Guest Conferee
H. W. Brown, M.D.
New York City

PEDIATRICS
English Room
Leader
M. F. Osterlin, M.D.
Traverse City
Guest Conferee
L. F. Hill, M.D.
Des Moines, Iowa

RADIOLOGY
Suite 500
Leader
Lawrence Reynolds, M.D.
Detroit
Guest Conferee
W. E. Chamberlain, M.D.
Philadelphia, Pa.

SURGERY
Grand Ballroom
Leader
E. A. Osius, M.D.
Detroit
Guest Conferees
R. W. McNealy, M.D.
Chicago
H. B. Shumacker, Jr., M.D.
Indianapolis

UROLOGY
Parlors G-H-I
Leader
R. J. Hubbell, M.D.
Kalamazoo
Guest Conferee
G. C. Prather, M.D.
Brookline, Mass.

*Due to Dr. Doan's schedule, the Discussion Conference on MEDICINE will be held an hour earlier than the others from 4:00 to 5:00 p.m. All other Conferences scheduled for Wednesday will be held at the regular hour—5:00 to 6:00 p.m.

THURSDAY, SEPTEMBER 21, 1950
5:00 to 6:00 p.m.

GENERAL PRACTICE
English Room
Leader
J. F. Failing, M.D.
Grand Rapids
Guest Conferee
W. F. Mengert, M.D.
Dallas, Texas

MEDICINE
Esquire Room
Leader
R. L. Novy, M.D.
Detroit
Guest Conferee
Antonio Rottino, M.D.
New York City

GYNECOLOGY AND OBSTETRICS
Suite 808
Leader
R. W. Alles, M.D.
Detroit
Guest Conferees
J. L. McKelvey, M.D.
Minneapolis
H. F. Traut, M.D.
San Francisco

OTOLARYNGOLOGY
Founders Room
Leader
A. J. Cortopassi, M.D.
Saginaw
Guest Conferee
P. M. Moore, Jr., M.D.
Cleveland

PEDIATRICS
Pan American Room
Leader
E. H. Watson, M.D.
Ann Arbor
Guest Conferee
C. F. McKhann, M.D.
Cleveland

PUBLIC HEALTH & PREVENTIVE MEDICINE
Parlors G-H-I
Leader
O. D. Stryker, M.D.
Mt. Clemens
Guest Conferee
V. A. Getting, M.D.
Boston

SURGERY
Grand Ballroom
Leader
F. A. Coller, M.D.
Ann Arbor
Guest Conferees
W. A. Altemeier, M.D.
Cincinnati
J. T. Priestley, M.D.
Rochester, Minn.

FRIDAY, SEPTEMBER 22, 1950
4:30 to 5:30 p.m.

GENERAL PRACTICE
English Room
Leader
E. H. Fenton, M.D.
Detroit
Guest Conferee
Priscilla White, M.D.
Boston

MEDICINE
Grand Ballroom
Leader
H. H. Riecker, M.D.
Ann Arbor
Guest Conferees
E. L. Bortz, M.D.
Philadelphia
F. F. Yonkman, M.D.
Summit, N. J.

PATHOLOGY
Pan American Room
Leader
O. W. Lohr, M.D.
Saginaw
Guest Conferee
J. R. McDonald, M.D.
Rochester, Minn.

PEDIATRICS
Parlors G-H-I
Leader
P. V. Woolley, M.D.
Detroit
Guest Conferee
W. L. Bradford, M.D.
Rochester, N. Y.

SURGERY
Esquire Room
Leader
J. D. Miller, M.D.
Grand Rapids
Guest Conferees
W. H. Cole, M.D.
Chicago
W. F. Rienhoff, Jr., M.D.
Baltimore

SYPHILOLOGY
Suite 500
Leader
L. W. Shaffer, M.D.
Detroit
Guest Conferee
L. A. Brunsting, M.D.
Rochester, Minn.

ALL MEMBERS ARE INVITED TO JOIN IN THESE QUIZ PERIODS WITH THE GUEST ESSAYISTS

THURSDAY AFTERNOON
September 21, 1950

Fourth Assembly

Grand Ballroom, Book-Cadillac Hotel

Chairman: W. B. Harm, M.D., Detroit
Secretary: J. W. Hall, Jr., M.D., Traverse City

P.M.
1:30 **"Hodgkins Disease Treatment and Factors Influencing Results"**

Antonio Rottino, M.D., New York, New York

Vice President of Hodgkins Disease Foundation; Instructor Department of Pathology, New York University and Bellevue Medical School.

2:00 **"Clinical Use of the Newer Antibiotics in Surgery"**

William A. Altemeier, M.D., Cincinnati, Ohio

Assistant Professor of Surgery, University of Cincinnati.

The rapid growth of chemotherapy during the past few years has made it almost impossible for the practicing physician to keep fully informed. More than 184 antimicrobial agents have been described in the literature up until the present time and many hundreds have been under laboratory investigation. Bacitracin, polymyxin, aureomycin, chloromycetin, terramycin and neomycin are the most promising of the newer antibacterial agents. Each has withstood the preliminary and intensive laboratory investigation and each is now being thoroughly investigated in the clinical management of infections.

Our experimental and clinical studies conducted at the Cincinnati General Hospital indicate that the field of antimicrobial therapy has been extended by these newer agents. An analysis will be given of the results obtained in a variety of surgical infections such as pyogenic lesions, Gram-negative bacterial infections, peritonitis, mixed infections of wounds and burns, and a miscellaneous group. In recent years many clinicians have acquired the erroneous belief that there is no longer any problem in the control of surgical infections. Because of the natural variation of bacterial susceptibility, the acquisition of bacterial resistance during treatment with the various antibiotics, and the development of increasing numbers of bacterial strains resistant to the antibacterial agents, the problems in successful management of surgical infections have actually been increased with the development of each new agent. Because of the complexity of efficient modern antibiotic therapy, it is strongly recommended that clinicians have available in local hospitals a good laboratory capable of giving readily and quickly information regarding the types of causative micro-organisms and their susceptibility to the various antibiotic agents both at the start of and during treatment.

2:30 **"Does Uterine Myoma Always Mean Operation?"**

William F. Mengert, M.D., Dallas, Texas

Professor and Chairman, Departments of Obstetrics and Gynecology, Southwestern Medical School of the University of Texas and Parkland Hospital.

Myoma of the uterus is one of the commonest of all tumors, and occurs in approximately one-fifth of all women over 35 years of age. There are no recorded cases of uterine myoma prior to puberty, and few develop before the age of 25 years. If a woman with multiple myomas succeeds in reaching the menopause without being forced to do something about them, she will probably go through the rest of her life with no further difficulty.

Myomas can influence the reproductive function in many ways, but by and large the majority of women with myomas will become pregnant, carry through to term without event, give birth to healthy children and have no serious sequels.

The choice of treatment for uterine myomas must be predicated upon the symptomatology, the age and the number of children of the woman with the tumors. In fact, the mere presence of a symptomless uterine myoma in a woman prior to the menopause is not in itself indication for treatment. There are two types of treatment for women with uterine myoma: operation and irradiation. At operation only the tumors may be removed (myomectomy) or the uterus can be extirpated totally, or supravaginally. Irradiation may produce a negligible effect on the tumor, but in general achieves its purpose through the atrophy following induction of an artificial menopause.

3:00 **INTERMISSION TO VIEW EXHIBITS—Your Friends Await You**

4:00 **"Some Problems of Mid-Pelvic Dystocia"**

John L. McKelvey, M.D., Minneapolis, Minnesota

Professor and Head of the Department of Obstetrics and Gynecology, University of Minnesota Medical School.

Gradually over the years it has become safer for women to have babies. In the United States the risk to the mother is now just about one-tenth of what it was twenty years ago. A significant part of this improvement is attributable to more accurate recognition and safer treatment of those women who have abnormally small bony pelves. The usual contractions which occur at the inlet and the outlet of the pelvis are now generally recognized and there has been a great increase in the safety which follows on the efficient handling of them. Between the inlet and outlet lies the so-called mid-pelvis. Accurate study of this area has lead to interesting findings which are now ready for more general recognition and application than they have as yet received. The significance of contractions in this region of the pelvis, the findings which indicate their presence, the clinical and accurate x-ray methods of recognition and the interpretation of various degrees of such abnormalities will be discussed.

4:30 **"Surgical Lesions of the Stomach"**

James T. Priestley, M.D., Rochester, Minnesota

Head of a Section in the Division of Surgery, the Mayo Clinic, Professor of Surgery, The Mayo Foundation, University of Minnesota.

5:00 **End of Fourth Assembly**

5:00 **Discussion Conferences on General Practice, Medicine, Gynecology and Obstetrics, Otolaryngology, Pediatrics, Public Health and Preventive Medicine, and Surgery** **(See Page 958).**

THURSDAY EVENING
September 21, 1950

STATE SOCIETY NIGHT
Grand Ballroom, Book-Cadillac Hotel

P.M.
10:30 **An evening of entertainment for all registrants, their ladies and guests.**

Cabaret-style Dance and Floor Show.

Host: Michigan State Medical Society.

(Admission by card furnished to all upon registration)

ONLY ONE MORE DAY TO VISIT YOUR MANY FRIENDS IN THE EXHIBIT

FRIDAY MORNING
September 22, 1950

Fifth Assembly

Grand Ballroom, Book-Cadillac Hotel

Chairman: J. S. DeTar, M.D., Milan
Secretary: R. W. Teed, M.D., Ann Arbor

A.M.

9:00 **"Clinical Application of Adrenergic Blockade in Sympathetic Predominance"**

FREDRICK F. YONKMAN, M.D., Summit, New Jersey

Director of Research, Ciba Pharmaceutical Products, Inc., Summit, New Jersey; Lecturer in Pharmacology and Therapeutics, Columbia University College of Physicians and Surgeons.

Adrenergic blockade represents that condition which is produced mechanically or medically, resulting in the insulation of an end organ, such as a blood vessel, against its normal sympathetic stimuli. The value of such an insulation can be appreciated in such conditions associated with vasospasm as arterial obliterans, diabetic gangrene, thrombo-angiitis obliterans, Raynaud's syndrome, causalgias, trench and immersion foot, thrombophlebitis, lymphedema, post-traumatic edema, scleroderma, herpes zoster, post-herpetic neuralgias, and acute ischemia.

Sympathectomy has been demonstrated to be of real value in many instances and certain chemical moieties have likewise leveled down to their probable value in some of these conditions. These compounds will be discussed with special attention directed toward the "peripheral blockers" rather than the "ganglionic blockers." Limitations of drugs will be stressed and attention will be drawn to new developments in this type of neural blockade.

9:30 **"The Present Status of the Syphilis Problem"**

LOUIS A. BRUNSTING, M.D., Rochester, Minnesota

Professor of Dermatology and Syphilology, Mayo Foundation.

In the past decade a number of factors have been working together toward the control of syphilis in the general population:

1. An enlightened public opinion.
2. Improved undergraduate medical instruction.
3. Improved, standardized and extended laboratory facilities.
4. The use of screening serologic surveys applied to large sectors of the population, military and civil, in industrial and insurance examinations and with serologic testing as an increasing part of routine physical examinations, premarital tests and examinations of pregnant women.
5. The increased use of social service facilities in the investigation of contacts of infected persons and in follow-ups.
6. Participation of public health facilities in setting up intensive rapid treatment centers.
7. The use of co-operative groups in the study of mass material in appraising ideal schedules of treatment.
8. An appreciation of the possibility of reinfection and relapse.
9. Biologic studies on the life cycle of Treponema pallidum; the investigation of treatment-resistant strains.
10. The revolutionary impact of penicillin and other antibiotics on the management of syphilis in all its phases;
    a. Simplification of schedules of treatment.
    b. Economic factors in treatment.
    c. High percentage of patients finishing required minimal treatment.
    d. Lessened incidence of complications of treatment.
    e. Lessened incidence of serious late complications of the disease.
    f. Abolishment of congenital syphilis.

With adequate facilities for diagnosis and treatment, the big problems remaining are to maintain public interest, to explore the reservoir of hidden cases and to control sporadic outbursts of the communicable phases of the disease.

Except in the laboratory, in studies on serologic reactions and the biology of the causative organism, in teaching institutions and in medical diagnostic centers, there is diminishing emphasis on the specialist in syphilis. The problem of the practical management of the disease has come to rest where it belongs; namely, in the hands of the general practitioner of medicine. The laboratory should be his guide, not his dictator. He must maintain a high index of suspicion, be alert in his diagnostic acumen and keep abreast of the latest developments in the simplification of treatment for the benefit of his patients. Various schedules of approved procedures of treatment are outlined.

10:00 **INTERMISSION TO VIEW EXHIBITS—They Close at 3:30 p.m. TODAY**

11:00 **"The Complications of Diabetes and Their Management"**

PRISCILLA WHITE, M.D., Boston, Massachusetts

Physician, New England Deaconess Hospital; Instructor, Tufts College Medical School; Associate Physician, Josline Group, Boston Lying-in Hospital.

Diabetic children live long and much longer than hitherto supposed. Of our children with onset under 15 years of age some 616 have had diabetes for more than 20 years and of these 555 are living. Many have complications but there are some who have earned the Quarter Century Victory Medal for perfection.

The paper will include a report upon these children and also refer to the 137 who died in the last 6 years and their causes of death. The picture of the two groups gives hope for the future.

Continued improvement in the treatment of young pregnant diabetics is registered. The measures employed in their treatment will be discussed.

11:30 **"The Modern Medical Treatment of Epilepsy and the Electroencephalographer"**

FREDERIC A. GIBBS, M.D., Chicago, Illinois

University of Illinois College of Medicine Department of Psychiatry, Illinois Neuropsychiatric Institute.

Senior Consultant in Neuropsychiatry and Director of the Department of Electroencephalography at St. Luke's Hospital; Associate Professor of Psychiatry.

New understanding and new power to control epileptic seizures has been given the modern doctor. This power has come from the development of a new technique, electroencephalography, with recording made during sleep, and the development of new drugs, namely, Mesantoin, Tridione, Paradione, Phenurone, and Nuvarone.

The electroencephalograph shows that epilepsy is an irritative reaction to brain injury and that some cases of supposed hysteria, neurosis, and behavior disorder are actually epileptic in nature. Electroencephalograms made during sleep are twice as informative as those made in the waking state. The drugs which are likely to be beneficial will differ in different types of epileptic disorders. Dilantin and Nuvarone and phenobarbital or Mesantoin are the drugs of choice for the treatment of convulsive disorders, and also for the treatment of psychomotor attacks and psychic equivalents. Petit mal seizures, i.e., brief lapses of consciousness, usually with blinking or nodding of the head, are often made worse by Dilantin and Mesantoin, and are best treated with Tridione or Paradione. Both of these substances are likely to increase convulsive seizures. In cases of mixed types of seizure, or when two or more different seizures are present, Phenurone may give relief when all other substances fail. In some patients, however, Phenurone has produced serious liver damage, so it should be held in reserve and used only when seizures cannot be controlled with less dangerous substances.

The general rules for anti-epileptic medication are: (1) Determine the type or types of seizure from the clinical history and electroencephalographic study. (2) Use that drug or combination of drugs which will most likely control such seizures as are present. (3) Try first the drugs that are least toxic and proceed later to use those that are possibly more (or possibly less) effective and more toxic. (4) Raise the dose to tolerance or until seizures are controlled. (5) Discontinue a drug if at maximum tolerated dosage seizures are not reduced. (6) Continue whichever drug proves effective and try to supplement it with other substances in order to obtain complete control of seizures. (7) Use as maintenance medication the drug or combination of drugs that prove most effective.

For a cost of less than twenty-five cents a day the seizures of 80 per cent of persons with epilepsy can be controlled to a point where they are able to lead normal, useful lives. The remaining 20 per cent will benefit from the rapid strides that are now being made in the development of new drugs and new diagnostic methods. Modern medicine is well on its way to the conquest of an old disease; a major that afflicts half a million people in the United States. The key to the problem has been furnished by ultra-technical research, but the hand that turns the key is the hand of the physician.

12:00 **End of Fifth Assembly**

INTERMISSION TO VIEW EXHIBITS

—— Program of Sections ——

FRIDAY NOON
September 22, 1950

12:15 p.m. to 1:30 p.m.
Subscription luncheon for all who attend Section Meetings—English Room

SECTION ON PATHOLOGY
Pan American Room

Chairman: D. H. KAUMP, M.D., Detroit

"The Limitations of Histopathology in the Diagnosis of Granulomas"

JOHN R. MCDONALD, M.D., Rochester Minnesota

The role that histopathology should play in determining the correct etiologic agent responsible for a given granuloma needs re-evaluation. Too frequently the clinician and surgeon are prone to accept a histopathologic diagnosis of a specific type of granuloma without questioning such a diagnosis. Some of the blame for this lack of critical interpretation must rest with pathologists, who have not made their clinical and surgical colleagues aware of the shortcomings of histopathologic techniques in the problem of granuloma.

No one can imply that histopathology is a worthless tool in evaluation of the granulomas. On the other hand, bacteriologic methods alone will not offer the answer in a wide variety of the granulomas. We believe that the etiologic agent responsible for granulomas can be determined in the greatest number of cases by the close co-operation of pathologist, bacteriologist and chemist.

We plan to illustrate this theme with a series of cases designed to show where the etiologic agent was determined by the pathologist, tissue bacteriologist and chemist.

SECTION ON MEDICINE
Grand Ballroom

Chairman: G. C. THOSTESON, M.D., Detroit
Secretary: J. W. HALL, JR., M.D., Traverse City

"Neurogenic Hypertension, Chemical Approaches to its Amelioration"

FREDRICK F. YONKMAN, M.D., Summit, New Jersey

That type of hypertension due to or associated with an element of vasospasm yields, in varying degrees, to correction by procedures which permit relaxation of the spastic blood vessels. The limited value of sympathectomy would indicate that adrenergic predominance may well be at least a contributing factor in neurogenic hypertension in which case, medical scalpels in the form of chemical compounds which specifically block these sympathetic pathways might be included in any given therapeutic regime designed for this malady. The role of new compounds, including certain imidazolines and phthalazines, will be discussed with special emphasis placed upon their different mechanisms of action and their current status as therapeutic agents. Particular attention will be given to that disturbing feature associated with sustained treatment by any hypotensive agent, namely, the tendency on the part of the patient's blood pressure to resume premedication levels, apparently through refractoriness to the drugs. Suggestions to circumvent this refractoriness will be presented for consideration.

SECTION ON GENERAL PRACTICE
English Room

Chairman: J. F. FAILING, M.D., Grand Rapids
Secretary: E. H. FENTON, M.D., Detroit

"NPH-50 Insulin"

PRISCILLA WHITE, M.D., Boston, Massachusetts

SECTION ON NERVOUS AND MENTAL DISEASES
Founders Room

Chairman: P. C. ROBERTSON, M.D., Ionia
Secretary: R. A. MORTER, M.D., Kalamazoo

"Thalamic and Anterior Temporal Lobe Epilepsy—Diagnosis and Treatment of Two Commonly Mis-Diagnosed Disorders"

FREDERIC A. GIBBS, M.D., Chicago, Illinois

Fourteen-and-six per second positive spikes occur during light sleep in the electroencephalogram of patients who show symptoms suggesting "organic neurosis" or "functional seizures," "hysterical blackout spells," or "rage attacks," "abdominal migraine," and a variety of other symptoms. The electroencephalographic findings and the general character of the associated symptomatology suggests involvement of the thalamus and hypothalamus in an epileptic process.

Fortunately, in such cases maintenance dosage with Dilantin, phenobarbital or Mesantoin usually provides a highly effective therapy.

Anterior temporal lobe seizure activity is usually demonstrable in patients with trance-like attacks and confusional episodes (psychomotor seizure). Such patients, as a rule, are highly resistant to medication and if seizures are controlled with drugs, psychiatric disorder, which is a commonly associated but independent symptom, is likely to become intensified. In cases where all medication has been found ineffective, and the clinical disorder is severely handicapping, surgical extirpation of the discharging anterior temporal lobe should be undertaken. The operation should be carried out, however, under the guidance of the electroencephalogram. Recording should be carried out on the exposed brain at operation and after temporal lobectomy in order to obtain assurance that the epileptic focus has been as completely removed as possible.

SECTION ON ANESTHESIA
Suite 500

Secretary: H. J. VAN BELOIS, M.D., Grand Rapids

Discussion on "Pulmonary Edema as Related to Anesthesia"

Leader: HARRY C. KURTZ, M.D., Detroit

FRIDAY AFTERNOON
September 22, 1950

Sixth Assembly

Grand Ballroom, Book-Cadillac Hotel, Detroit

Chairman: L. W. HULL, M.D., Detroit
Secretary: E. H. FENTON, M.D., Detroit

P.M.

1:30 **"Carcinoma of the Lung"**

WILLIAM F. RIENHOFF, JR., M.D., Baltimore, Maryland

Associate Professor of Surgery, Johns Hopkins Hospital.

The present status of the treatment of malignancy of the lung will be discussed from the standpoint of etiology, symptoms and signs, pathological changes, surgical treatment with follow-up results and the restitutional intrathoracic changes following various operations upon the lung. The prognosis in relation to certain types of tumors with and without surgical treatment will be reviewed. Also, an evaluation will be made of the various methods of examinations at our disposal.

2:00 **"The Diagnosis, Treatment and Prevention of Whooping Cough"**

WILLIAM L. BRADFORD, M.D., Rochester, N. Y.

Professor of Pediatrics and Assistant Dean, The University of Rochester School of Medicine and Dentistry.

In the typical case the diagnosis of Pertussis is readily made. In the early catarrhal period it may be difficult. A history of exposure may not be available, the cough is not typical, and the results of the blood count are often equivocal.

Infection of the tonsils and adenoids, sinusitis, allergic bronchitis, atypical viral pneumonia, the pulmonary complications of fibrocystic disease of the pancreas, and parapertussis are a few of the conditions which enter into the differential diagnosis. Acute infectious lymphocytosis, because of the blood picture is occasionally confused with Pertussis. Modification of the disease resulting from previously injected vaccine may add to the diagnostic difficulties.

The use of the cough-plate and nasal-culture methods is an adjunct to clinical diagnosis. The nasal-culture method which is superior to the cough-plate method, particularly in infants, is described.

Since about 10 per cent of all cases of Pertussis and 65 per cent of the deaths from the disease occur during the first year of life it is not surprising that much attention has been given to prevention of the disease in this age group. For passive protection of the exposed infant, anti-serums, both human and rabbit, are available and effective. Recent studies have proved that active immunization in the early weeks of life is also possible. In a group of infants injected during early infancy with a triple alum-precipitated vaccine, the humoral antibody response was found to be adequate. Charts showing the results of these studies are shown.

Treatment of the infant seriously ill with Pertussis usually requires hospital care. In no other disease is good nursing more essential. The feeding and management of the choking spells require expert care.

Oxygen is probably the best single therapeutic agent. The proper administration of sedatives is important, for over-sedation is harmful.

Sulfadiazine and hyperimmune serum, either human or rabbit, are each therapeutically effective, and in combination, represent an excellent form of therapy. The antibody content of rabbit anti-serum definitely exceeds that of human anti-serum.

The organism is susceptible to streptomycin in vivo as well as in vitro but readily becomes resistant to it.

Favorable reports have appeared concerning chloromycetin, aureomycin and terramycin but more data is desirable before final assessment of their respective therapeutic merits can be made.

2:30 "The Clinical Importance of 'Early Cancer' "—Co-author: Lewis B. Woolner, M.D.

JOHN R. McDONALD, M.D., Rochester Minnesota

Professor of Pathology, Mayo Foundation Graduate School, University of Minnesota; Head of Section of Surgical Pathology, Mayo Clinic.

The campaign for cancer control which has been conducted by state and national organizations has, in part, been directed toward the recognition and eradication of lesions which are thought to be either "precancerous" or "early cancer." Knowledge of the significance of these various lesions is necessary for the physician to treat these lesions intelligently.

A consideration of certain lesions in the breast, uterus, bowel, skin, mucous membranes of the mouth, nose and throat and urinary tract will be included in the presentation. These lesions will be presented as seen through the eyes of a surgical pathologist, with particular emphasis on the growth factor of such lesions.

The lesions to be considered include benign hyperplastic growths such as leukoplakia, benign epithelial hyperplasia and noninfiltrating carcinoma or carcinoma *in situ*.

3:00 INTERMISSION TO VIEW EXHIBITS—Your Last Opportunity—For 30 minutes only.

3:30 "Obstruction of the Common Duct by Stone"

WARREN H. COLE, M.D., Chicago, Illinois

Professor and Head of Department of Surgery, University of Illinois College of Medicine.

The diagnosis of obstruction of the common duct by stone is usually made without difficulty by the development of severe pain in the right upper quadrant and pigmentation associated with appearance of jaundice a day or two following the attack of pain. As jaundice develops the stools become acholic. Characteristically, this jaundice is intermittent as are also the acholic stools. In fact, this point becomes a very important one in differentiating the lesion from carcinoma of the pancreas. It must be remembered that patients found to have stones in the common duct at operation are frequently not jaundiced. In fact, a survey of data from the literature indicates that jaundice is not present in 30 per cent of patients with stone in the common duct. When operating on patients with stones in the common duct care must be taken lest one of the stones be pushed upward into the liver. The author inserts a T-Tube at the end of the operation, and after about six or seven days clamps it an hour or more per day, increasing gradually until the patient is able to tolerate obstruction of the tube permanently. As soon as obstruction of the tube can be tolerated without pain, it is removed. Rarely, are more than sixteen to eighteen days required for establishment of normal bile flow and removal of the tube.

Suppurative cholangitis is commonly associated with common duct stone, but is probably more common as a complication of stricture. With few exceptions suppurative cholangitis is a strong indication for operative interference consisting primarily of extraction of the stone and drainage of the common duct. It does not respond to penicillin, but streptomycin is frequently effective. We have not had sufficient experience with aureomycin to determine what effect it might have on suppurative cholangitis, but if obstruction is present it must be relieved. When a stone is lodged in the lower end of the duct and cannot be moved upward, incision in the second portion of the duodenum over the ampulla of Vater may be necessary. On such occasions the sphincter of Oddi is dilated and perhaps incised to allow extraction of the stone from the duodenal side.

4:00 "The Elderly Patient"

EDWARD L. BORTZ, M.D., Philadelphia, Pennsylvania

Associate Professor of Medicine, Graduate School of Medicine, University of Pennsylvania; Chief, Medical Service "B," The Lankenau Hospital.

The increasing effectiveness of disease control plus advances in knowledge of nutrition and the over-all protection of human life is bringing about a significant change in the population pattern in the United States. Premature human deterioration may be largely avoided by application of well-known measures for the control of disease and the preservation of human values.

In 1900 folks over sixty-five made up 4.1 per cent of the population. Today they are 7.6 per cent, and in another decade they may well represent 12 per cent plus. Elderly individuals too frequently are the victims of preventable disorders. Ill-balanced diets, overweight, excessive wear and tear may readily be controlled. The major problems of oldsters consist of vascular deterioration, disorders of the digestive tract, the urinary tract, or the blood stream. Emotional and personality disorders occur too frequently.

The defeatist attitude and taking for granted the deterioration of the body as merely the result of long years of living needs to be replaced by an attitude of hopefulness and curiosity concerning the real causes of premature human deterioration. Fatigue and weariness in elderly folks frequently results from anemia and malnutrition. Excessive wear and tear on the blood vessels may be minimized by weight reduction if the patient is overweight, by modification of the diet, and by the reduction of the physical and emotional expenditure of the individual. Probably fifty per cent of the cases of hypertension are amenable to correction by medical measures.

In the management of elderly patients, which is a challenge to the modern doctor, the point of view of each individual is important. Much can be accomplished to extend the mature years and delay the ravages of senility. The treatment of the patient, as a whole, and the maintenance of his interests and social responsibility offer the family physician excellent opportunities for bringing about a richer, happier, and more interesting existence for his patients who should be enjoying the harvest years of the human life span.

4:30 End of Sixth Assembly

4:30 Discussion Conferences on Medicine, General Practice, Pathology, Pediatrics, Surgery, and Syphilology

5:30 END OF SCIENTIFIC ASSEMBLY AND OF 1950 ANNUAL SESSION

Technical Exhibits

Abbott Laboratories
North Chicago, Ill. **Booth No. 47**

Abbott will exhibit a number of its leading products, such as Abbocillin-DC, 600,000 units of penicillin in a 1 c.c. cartridge; Sucaryl Sodium, a non-caloric sweetening agent that withstands cooking, baking and canning; Nembutal, a short-acting barbiturate; Pentothal Sodium, an intravenous anesthetic, and certain vitamin products.

Allen Agency
Detroit, Michigan **Booth No. 25**

Miss Allen, director of the Allen Agency, will be at the convention again this fall to talk with you about your employment problems and give all possible assistance.

A. S. Aloe Company
St. Louis, Missouri **Booth No. 50**

The Aloe representative will be happy to welcome you at Booth No. 50. He has on display a representative cross-section of the surgical and laboratory equipment and supplies stocked by the "world's largest surgical and supply house." Featured are many new items which you will want to see and have demonstrated.

American Hospital Supply Corporation
Evanston, Illinois **Booth No. 65**

Baxter Intravenous Solutions, Blood Transfusion and Plasma equipment with disposable accessories for their use; blood grouping and testing serums; complete line of reagents and standards; Tomac Oral Protein Supplement; the Flicker Photometer for early detection of heart disease; and a selected group of Tomac Specialties.

Ames Company, Inc.
Elkhart, Indiana **Booth No. 33**

Ames Company, Inc., will be showing the new "Universal Model" CLINITEST Urine-sugar Analysis Set. BUMINTEST reagent tablets, Ames Company's new test for albumin, will be demonstrated at the Ames booth. The representatives will also be demonstrating ACETEST and HEMATEST, simplified tests for the detection of acetone bodies and occult blood.

Armour Laboratories
Chicago, Illinois **Booth No. 41**

The Armour Laboratories will welcome members of the Michigan State Medical Society to visit the Armour Exhibit while attending their Annual Session. Information on many new items in the field of endocrinology recently made available to the medical profession by The Armour Laboratories, may be secured at the Armour booth.

Ayerst, McKenna & Harrison, Ltd.
New York, New York **Booth No. 44**

Ayerst®

"PREMARIN" (Estrogenic Substances—water-soluble)—a highly effective and well-tolerated preparation of naturally occurring, orally active conjugated estrogens (equine). The potency of "Premarin" is expressed in terms of its principal estrogen, sodium estrone sulfate.

Baker Laboratories, Inc.
Cleveland, Ohio **Booth No. 74**

Starting with Grade A cows' milk as the basis of the formula, Baker's Modified Milk (Powder and Liquid) is fortified at seven strategic points to obtain more efficient nutritive action and is adjusted and processed to insure better tolerance. Our representatives will gladly tell you more about this complete, easily prepared, low cost infant food.

Bard-Parker Company, Inc.
Danbury, Connecticut **Booth No. 78**

Genuine Bard-Parker "Rib-Back" surgical knife blades that assures cutting efficiency."A quality product that makes for blade economy; B-P handles of various types; Bard-Parker Germicide—a sporicidal solution; CHLOROPHENYL: instrument sterilizing containers: the Reese Dermatome—for obtaining accurate split grafts—saves valuable operating time.

Barlow-Maney Laboratories, Inc.
Cedar Rapids, Iowa **Booth No. 11**

The Barlow-Maney exhibit is featuring our Council Accepted Aminophylline products, tablets and ampoules, which are manufactured by an improved process in our new laboratories and contain not less than 80 per cent anhydrous theophylline. A mechanical apparatus showing the effect of gastric juice and intestinal fluid on Encotes, the Barlow-Maney enteric coating, will also be operated by our qualified representatives, who welcome this opportunity to be of service.

A. C. Barnes Company
New York, New York **Booth No. 40**

The A. C. Barnes Company, New Brunswick, New Jersey (Booth No. 40) cordially invite all physicians to visit their exhibit. ARGYPULVIS, a recent addition to the BARNES line, will be feautred by a series of illuminated color transparencies depicting an effective new treatment for Trichomonas vaginalis vaginitis. Literature and professional samples will be available. ARGYROL and OVOFERRIN also will be on display. See the BARNES color and sound films—"Cervicitis—Etiology and Treatment" and "Non-Operative Treatment of Paranasal Sinusitis" at the Scientific Motion Picture Exhibit.

Barry Laboratories, Inc.
Detroit, Michigan **Booth No. 23**

The Barry Laboratories will display the most recent advancements in parenteral therapy in the form of completed products. The Allergy Division of the Company will have on hand a technical staff to handle questions regarding the diagnosis and treatment of allergy cases as well as the equipment to aid in such diagnosis.

The Borden Company
New York, New York **Booth No. 30**

Meet BIOLAC, a liquid modified milk for infant feeding: DRYCO, with its formula flexibility; MULL-SOY for your milk allergic patients; powdered whole milk KLIM: the improved milk sugar, BETA-LACTOSE; and the MERRELL-SOULE PROTEIN and LACTIC ACID MILKS. Borden men are pleasant men!

Brooks Appliance Company
Chicago, Illinois **Booth No. 18**

You will want to visit Booth No. 18 of the BROOKS APPLIANCE COMPANY, where W. C. Ayer will describe the technique of applying the absolutely new Polyestol Bandage, which releases Methyl Salicylate in controllable doses and opens a new field for the treatment of conditions in which the use of Salicylates have been recognized to be of great value.

Burroughs Wellcome & Co., Inc.
Tuckahoe, New York **Booth No. 55**

"B. W. & Co." will feature a completely new type antihistaminic, "PERAZIL" brand Chlorcyclizine Hydrochloride. "PERAZIL" differs chemically in that it is a piperazine, rather than a conventional ethylenediamine compound, and a single dose provides 12 to 24 hour action. We will also feature "Wellcome" brand GLOBIN INSULIN, the accepted intermediate-acting insulin, and DIGOXIN, for safe, predictable digitalization.

Camel Cigarettes
New York, New York **Booth Nos. 35, 36**

CAMEL Cigarettes will feature color slides of background data from their newest research. After weekly examinations of the throats of hundreds of men and women smoking CAMEL Cigarettes exclusively for thirty days, throat specialists reported "Not one single case of throat irritation due to smoking CAMELS."

Cameron Heartometer Company
Chicago, Illinois **Booth No. 17**

See the improved Heartometer, a scientific precision instrument for accurately recording systolic and diastolic blood pressures, also furnishing a permanent graphic record of the pulse rate, disturbances of the rhythm, myocardial responses, the action of the valves, as well as peripheral vascular circulation. The Heartometer clearly reveals heart disturbances in both early and advanced stages and is of great value in checking the progress of treatments.

Cameron Surgical Specialty Company
Chicago, Illinois **Booth No. 56**

See the new Binocular Spectacle Loupes; Mirror Type and other Headlites; Suction Coagulation Handle and numerous accessories for all phases of Electro-Surgery, Electro-Cauterization, Electro-Coagulation, Desiccation and Fulguration; Cameron Surgical Units; Electro-Diagnostic Lamp and Instrument Outfits; the new stainless steel Boros Flexible Esophagoscope and other Peroral Equipment; Coagulair and Dualite Sigmoidoscopes; Tele-Vaginalite; other Illuminated Specula, Endoscopes and Retractors; Flexible Gastroscopes and Stomach Camera.

Carnation Company
Los Angeles, California **Booth No. 93**

You are invited to visit Booth No. 93 where you will see an attractive display on Carnation Evaporated Milk—"the milk every doctor knows." Some valuable information on the use of this milk for infant feeding, child feeding and general diet purpose will be presented and the method by which Carnation is generously fortified with pure crystalline Vitamin D—400 U.S.P. units per reconstituted quart will be explained. Interesting literature will also be available for distribution.

Ciba Pharmaceutical Products, Inc.
Summit, New Jersey **Booth No. 84**

Ciba Pharmaceutical Products, Inc., Summit, New Jersey (Booth No. 84) invites you to visit its exhibit which features PRISCOLINE (formerly known as PRISCOL), a valuable adjunct to the treatment of peripheral vascular disease. PYRIBENZAMINE, HCL, the antihistaminic drug for prevention and relief of anaphylaxis and many forms of allergy will also be featured.

Representatives in attendance will gladly answer any questions about these and other Ciba products.

Coca-Cola Company
Atlanta, Georgia **Booth Nos. 98, 99**

Ice-cold Coca-Cola served through the co-operation and courtesy of the Detroit Coca-Cola Bottling Company and The Coca-Cola Company.

Detroit Creamery Company
Detroit, Michigan **Booth No. 96**

Sealtest

The Detroit Creamery and Ebling Creamery, local distributors of Sealtest Ice Cream, Milk and Dairy Products, invite you to stop at the booth displaying the Sealtest Symbol of quality through laboratory control. Representatives will be happy to answer any questions on the production of Dairy Products.

Detroit X-Ray Sales Company
Detroit, Michigan **Booth Nos. 37, 38**

A cordial invitation is extended to all the members of the Michigan State Medical Society, their friends and associates, to visit Booth Nos. 37 and 38 at the coming Michigan State Medical Meeting, where will be displayed latest advances in Mattern Shockproof X-ray Equipment. New Models—New Ideas—New Designs.

Dictaphone Corporation
Detroit, Michigan **Booth No. 9**

"The New Voice of Business," Dictaphone's plastic Memobelt record, will be the center of attraction at the Dictaphone exhibit during the Michigan State Medical Society Annual Session in Detroit. Made of pliable plastic, and just the size of a postcard, the Memobelt is a one-use recording medium. It has made possible the new conception of dictating machine—the new Dictaphone Time-Master—that has swiftly become the most successful dictating machine in history.

The Time-Master is just the size of a letterhead and only 4½" high. Designed to help busy people get more done, faster and with less effort, the Dictaphone Time-Master serves thousands of busy people in business, the professions and government throughout the world.

Dietene Company
Minneapolis, Minnesota **Booth No. 53**

Visit our exhibit and examine the Free Diet Service for physicians. The diets are nutritionally well-balanced, easy to follow and made to appear as if they were typed in your office.

MERITENE, the economical and palatable whole protein supplement, and DIETENE, the "Council-Accepted" reducing supplement, will be on display.

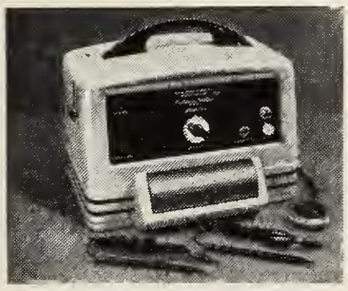
Doho Chemical Corporation
New York, New York **Booth No. 70**

The Doho Chemical Corporation and its subsidiary, Mallon Chemical Corporation, makers of AURALGAN, O-TOS-MO-SAN and RECTALGAN, are

proud to announce their new nasal decongestant, RHINALGAN—a balanced formulation of two active chemical compounds that gives prolonged vasoconstriction—used as a spray, in our patented Dohony Spray-O-Mizer (combination dropper and spray)—pleasant tasting, with no systemic effect (pressor or respiratory), and can be safely used for infants and children.

Our representatives will be happy to explain the merits of RHINALGAN and distribute samples of this innovation.

Electronic Surgical Equipment Co., Inc.
Philadelphia, Pa. **Booth No. 22**



ELECTRONIC SURGICAL EQUIPMENT CO., INC., BOOTH No. 22, will exhibit the RADIO-SURGICAL SCALPEL Operating Unit, a portable radio frequency surgical apparatus of advanced engineering design. This precision instrument permits the use of varied electronic surgical methods to meet the minor surgical needs of the general physician, proctologist, gynecologist, or surgeon. Constructed according to exacting specifications, and employing a new electronic principle of the fully rectified radio current, it supplies ideal current characteristics for all these surgical interventions.

Farnsworth Laboratories, Inc.
Chicago, Illinois **Booth No. 64**

FARNSWORTH LABORATORIES, INC., will feature injectible medications. The new adrenal steroid, COCOSTERONE, used in rheumatoid, arthritis! FARONATE, the intramuscular treatment for migraine and post-spinal tap headache; COLMETANESE, widely employed in virus infections, Brucellosis, and obscure fever conditions; QUINOCAINE, the prolonged water base, local anesthetic, are among the featured products.

Drop in at Booth No. 64, and discuss these products and their uses with Robert R. Grandy, professional representative.

H. G. Fischer & Company
Franklin Park, Ill. **Booth No. 10**

See and handle the Spacesaver Radiographic-Fluoroscopic Unit and Examining Table. See what a small amount of office space it occupies and how easy it is to change from horizontal fluoroscopy to horizontal radiography without moving the patient from the table. Other modern x-ray and physical therapy equipment will be on display.

C. B. Fleet Company, Inc.
Lynchburg, Virginia **Booth No. 29**

C. B. Fleet Co., Inc., cordially invites you to visit Booth No. 29. Increasingly, during the past fifty years, to the medical profession, sodium phosphate has come to mean Phospho-Soda (Fleet), the pure, stable, aqueous concentrate of the two U.S.P. sodium phosphates.

General Electric X-Ray Corporation
Milwaukee, Wisconsin **Booth No. 72**

GENERAL ELECTRIC X-RAY CORPORATION

To its old and new friends alike, the General Electric X-Ray Corporation extends a cordial invitation to visit their exhibit. Shown at this meeting for the first time will be the new Maxicon line of x-ray equipment that "grows with your practice," the portable, direct-writing Cardioscribe, the high-output Model E Inductotherm diathermy unit, and a line of x-ray supplies including Supermix chemicals in cans.

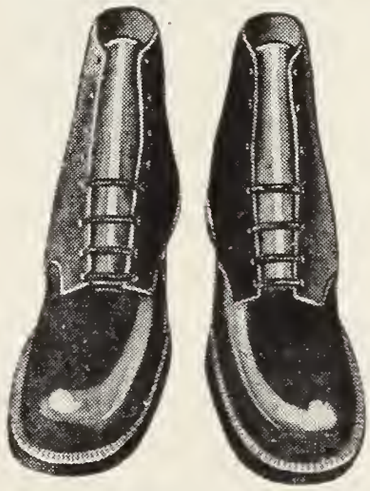
Gerber Products Company
Fremont, Michigan **Booth No. 34**

Gerber's three distinctive baby cereals give you prescription selectivity plus variety for your youngest patients. One-at-a-time introduction lowers the incidence of cereal-grain allergic manifestations.

Gerber's is a COMPLETE baby food service . . . Cereals, Strained and Junior fruits, vegetables and meat-soups PLUS Gerber-Armour meats.

Please come to see us at booth no. 34.

Hack Shoe Company
Detroit, Michigan **Booth No. 3**



HACK SHOE CO., Fifth Floor, 28 West Adams Avenue Building (Stroh) and 19170 Livernois, will be in its usual spot, demonstrating its wares. Prominently included will be the Hack TOE OUT Shoe for your mild cases of metatarsus adductus, illustrated at left.

This is Hack's 35th year of service to the profession.

Hanovia Chemical & Mfg. Company
Newark, New Jersey **Booth No. 59**

Hanovia will feature the new Short Wave Diathermy machine that meets the Federal Communication Commission's requirements, and is possessed of many features that will be worth your while to become acquainted with. A complete line of self-lighting ultraviolet quartz lamps for therapeutic purposes, for orificial and general body irradiation will be on display as well as Germicidal lamps for the destruction of airborne bacteria and the new Fluoro Lamp for diagnostic purposes.

J. F. Hartz Company
Detroit, Michigan **Booth No. 73**

The J. F. Hartz Company appreciates the privilege of displaying its complete line of Pharmaceuticals, as well as the latest in office and physiotherapy equipment, diagnostic and surgical instruments.

You are cordially invited to stop at our booth and inspect those items of particular interest to you.

Hoffman-La Roche, Inc.
Nutley, New Jersey **Booth No. 54**

Roche will feature GANTRISIN, the new sulfonamide which has outstanding therapeutic advantages. GANTRISIN is distinguished by comparatively high solubility even in neutral and slightly acid solutions. It is not likely to cause crystalluria and it does not require concomitant alkali therapy. GANTRISIN is highly effective in the treatment of systemic and urinary tract infections.

Why not stop at the Roche booth where members of the field staff will be in attendance to tell you more about GANTRISIN, the radically different sulfonamide?

Holland-Rantos Company, Inc.
New York, New York **Booth No. 32**

The H-R exhibit will feature Council-accepted KOROMEX PRODUCTS for conception control. See the different combination sets, the anatomically-correct Pelvi-Form Clinical Teaching Model and H-R Lubricating Jelly for gynecologic and surgical use. Investigate the effectiveness and practicability of NYLMERATE JELLY in the treatment of vaginal trichomoniasis and moniliasis.

G. A. Ingram Company
Detroit, Michigan **Booth Nos. 13, 14, 15**

THE G. A. INGRAM COMPANY will, as usual, have the latest Hamilton and Allison furniture on display, together with Burdick Physiotherapy Equipment, including their latest Short Wave Diathermy. They will also display a selection of Diagnostic Instruments for cancer detection, and the latest instruments for use in fracture work. Also included will be Electrocardiographs and new model Colorimeters.

THE G. A. INGRAM COMPANY service all of the equipment they sell.

The Junket Folks
Little Falls, New York **Booth No. 16**

Essential facts on the chemistry of the rennet enzyme and the nutritional significance and psychologic value of rennet desserts in the diets of infants and adults will be explained. The enzymatic action of rennet in producing softer, finer, more readily-digestible milk curds is illustrated by enlarged photos. Literature giving the dietary applications of rennet products is available for your reference.

C. B. Kendall Company
Indianapolis, Indiana **Booth No. 77**

C. B. Kendall Company cordially invite all members of the Michigan State Medical Society to visit their technical exhibit. Literature and samples of new pharmaceutical specialties which are currently being detailed and advertised to the profession will be available. Members of the Kendall detail staff will welcome your interest and questions relative to their specialties.

A. Kuhlman & Company
Detroit, Michigan **Booth No. 90**

A. Kuhlman & Co. invites you to visit their exhibit. Items of interest being shown are SHORT WAVE DIATHERMY, SURGICAL INSTRUMENTS, HAMILTON COLORTONE OFFICE FURNITURE, CYSTOSCOPES and ACCESSORIES.

Lea & Febiger
Philadelphia, Pa. **Booth No. 87**

Lea & Febiger will exhibit such outstanding new books and new editions as Epstein—Regional Dermatologic Diagnosis; Pullen—Communicable Diseases; Cozen—Office Orthopedics; McManus—Medical Diseases of the Kidney; Burch—Venous Pressure; Kessler—Rehabilitation; Holmes and Schulz—Therapeutic Radiology; Gregg—Coronary Circulation; Singer—Differential Diagnosis of Chest Diseases; Davidoff and Epstein—The Abnormal Pneumoencephalogram; Goldberger—Unipolar Lead Electrocardiography; Pohle—Clinical Radiation Therapy; Wesson—Urologic Roentgenology and many other standard books of clinical guidance.

Lederle Laboratories
New York, New York **Booth Nos. 51, 52**

You are cordially invited to visit our exhibit in Booths 51 and 52, where you will find representatives who are prepared to give you the latest information on Lederle products.

Liebel-Flarsheim Company
Cincinnati 2, Ohio **Booth Nos. 26, 27**

The Liebel-Flarsheim Company cordially invites you to visit Booth Nos. 26 and 27 in which their latest diathermy and Bovie electrosurgical apparatus will be available for examination and demonstration. Capable representatives will be on hand at all times and we hope you will stop by so that we may become acquainted.

Eli Lilly & Company
Indianapolis, Indiana **Booth No. 12**

Your Lilly medical service representative cordially invites you to visit the Lilly exhibit located in Booth No. 12. The display for 1950 features a presentation on the incidence and potential number of diabetics in America. The attending representatives will be pleased indeed to assist visiting physicians in every way possible.

J. B. Lippincott Company
Philadelphia, Pa. **Booth No. 1**

J. B. Lippincott Company presents an interesting and active exhibit of professional publishing. With the "pulse of practice" centering in an advisory editorial board of active clinicians who constantly review the field, current and coming trends in medicine and surgery are known continually. On the studied recommendations of these medical leaders, Lippincott Selected Professional Books are undertaken.

M & R Dietetic Laboratories, Inc.
Columbus, Ohio **Booth No. 24**

Our representatives for Similac and Cerevim will appreciate the opportunity to discuss the merits and use of our products in the field of infant and child nutrition.

Maico Hearing Service of Michigan
Detroit, Michigan **Booth No. 86**

The Display will consist of hearing aids and audiometers. The new type hearing aid is a small all-in-one instrument capable of amplifying the faintest sound 240,000 times. The new type Maico audiometer makes it possible for the first time to balance hearing so as to assist the doctor in a correct diagnosis of different type impairments.

Maltbie Chemical Company
Newark, New Jersey **Booth No. 97**

Representatives of Maltbie Laboratories, Inc., will be in attendance to explain selective medical therapy in hepato-biliary disease with Cholan-DH, Cholanor and Cholan-HMB with Phenobarbital.

S. E. Massengill Company
Bristol, Tennessee **Booth No. 62**

The S. E. Massengill Company invites you to visit Booth No. 62 where several specialty products are on display for your examination. Featured is Tablets Salcedrox, an outstanding recent development in the use of salicylates. Medical Service Representatives will be pleased to discuss this and the other Massengill products and you are invited to register for samples and literature.

Mead Johnson & Company
Evansville, Indiana — **Booth Nos. 88, 89**

Dextri-Maltose, Oleum Percomorphum, Pablum, Pabena, Olac and other Mead Products used in Infant Nutrition will be on display at the Mead Johnson Exhibit at the Michigan State Medical Society Meeting. Protenum, a new high protein product, will be displayed. Also, Lonalac, for low sodium diets.

Representatives at the Exhibit will be glad to discuss the new improvements of Amigen and Amisets.

Medical Arts Surgical Supply Company
Grand Rapids, Michigan — **Booth No. 91**

The Medical Arts Surgical Supply Co. will display equipment for your office including the Liebel-Flarsheim Diathermy, Beck-Lee Electrocardiograph with recording camera—and other diagnostic instruments of interest. Better stop in—they will be glad to see you.

Medical Protective Company
Fort Wayne, Indiana — **Booth No. 67**

The Medical Protective Company invites the members of the Michigan State Medical Society to visit its exhibit and discuss with their representative how the Company meets the exacting requirements of adequate liability protection which are peculiar to the professional liability field.

Merck & Company, Inc.
Rahway, New Jersey — **Booth No. 80**

Benodaine,* a diagnostic agent of value for detecting hypertension caused by the presence of an epinephrine-producing tumor (pheochromocytoma); COBIONE® (Crystalline Vitamin B-12 Merck) for the treatment of megaloblastic anemias; NEO-ANTERGAN®, an antihistaminic agent which is advertised to the medical profession exclusively; PAS (Para-Aminosalicylic Acid Merck) for complementing streptomycin and dihydrostreptomycin in tuberculosis therapy; and URECHOLINE®, for relieving urinary retention, gastric retention, and abdominal distention.

*"Benodaine" is the trademark of MERCK & CO., Inc., for its brand of piperoxane.

Wm. S. Merrell Company
Cincinnati, Ohio — **Booth No. 95**

Mercodol, the new antitussive syrup containing the better cough-controlling narcotic, Mercodinone, will be featured by Merrell. Mercodinone, a better antitussive agent than either heroin or codeine, is notably free from the undesirable side effects of the older drugs. Mercodol also contains the bronchodilator, Nethamine, and the saline-expectorant, sodium citrate.

Michigan Medical Service
Detroit, Michigan — **Booth Nos. 4, 5**

Michigan Medical Service—Hospitality Booth—Stop and Rest—We will answer all questions regarding "your" voluntary prepaid medical-surgical care plan. Doctors are also invited to visit our suite.

C. V. Mosby Company
St. Louis, Missouri — **Booth No. 43**

You are invited to visit the C. V. Mosby Company Booth No. 43, where you will find many new and interesting titles. Among these are Meakins "Practice of Medicine," Berman "Principles of Surgery," Brown "Post Graduate Obstetrics and Gynecology," Cleckley "Mask of Sanity," Dodson "Urological Surgery," Foote "Varicose Veins," Herrmann "Methods in Medicine," Illingworth and Dick "Textbook of Surgical Pathology," Shelton "Diseases of Infancy and Childhood," Titus "Management of Obstetric Difficulties" and many others.

National Drug Company
Philadelphia 44, Pa. — **Booth No. 58**

The National Drug Company, Philadelphia, Penna., cordially invite you to attend their booth. Resinat, Council-Accepted, a newly accepted therapy for peptic ulcer, and Protinal Powder, Council-Accepted, protein carbohydrate mixture, will be the featured products. AVC Improved-Hesperidin-C-Natolone and Benat with B-12 will also be on display. Representatives will be in attendance to discuss with physicians National's vast array of pharmaceutical, biologic and biochemical preparations.

Nestle Company, Inc.
New York, New York — **Booth No. 45**

The Nestle Company, Inc., cordially invite you to visit their exhibit where specially qualified representatives will be on hand to answer your questions on any of Nestle's milk products—already best known and most used for babies 'round the world.

Wm. R. Niedelson Company
Detroit, Michigan — **Booth No. 83**

The high degree of accuracy obtainable in Basal Metabolism testing with the new Jones "MULTIBASAL" Unit, will be demonstrated, as well as the accepted STANDARD model, popular for its extreme simplicity in calculation and operating procedure.

The only permanent type paper, direct recording cardiograph, the CARDIOTRON will be on display, showing its exclusive paper and Prestomatic lead switching device for all and multiple chest leads.

The new PROFEXRAY 100-100 Tilt Table will be displayed for the first time in the state of Michigan.

Noble-Blackmer, Inc.
Jackson, Michigan — **Booth Nos. 20, 21**

Your friendly representatives from Jackson will be present at No. 21 to show you the Birtcher Bandmaster Crystal Controled F.C.C. Approved Short Wave Diathermy, a complete line of Leitz Microscopes and "Light Where You Want It" with Castle Office Lights.

Ortho Pharmaceutical Corporation
Raritan, New Jersey — **Booth No. 61**

Ortho cordially invites you to visit Booth No. 61. Featured will be the ORTHO KIT, a new, convenient, and complete kit containing the requisites for conception control in a beautiful woven plastic zippered purse. New products displayed will include DIFFUSIN (hyaluronidase), MASSE' Nipple Cream, and other new gynecic pharmaceuticals.

Parke, Davis & Company
Detroit, Michigan — **Booth Nos. 6, 7**

Medical Service Members of the Parke, Davis & Company Staff will be in daily attendance at our Commercial Exhibit for consultation and discussion of the various Products listed in our Pharmaceutic, Antibiotic, and Biologic Catalog. Important Specialties, such as Chloromycetin, Penicillin S-R, Benadryl, Vitamins. Oxycel, Thrombin Topical, Influenza Virus Vaccine, and others will be featured. You are most cordially invited to visit our Exhibit with the assurance that your personal interest will be indeed be very much appreciated.

Pelton & Crane Company
Detroit, Michigan — **Booth No. 81**

Pet Milk Sales Corporation
St. Louis, Missouri — **Booth No. 79**

Specially trained representatives will be in attendance to discuss the use of Pet Milk in infant feeding, and to present many services that are time-savers for busy physicians. Miniature Pet Milk cans will be given to visitors at the exhibit.

Philip Morris & Company, Ltd.
New York, New York — **Booth No. 68**

Philip Morris and Company will show the results of research on the irritant effects of cigarette smoke. These results show conclusively that Philip Morris are less irritating than other cigarettes. An interesting demonstration will be made on smokers at the exhibit which will show the difference in cigarettes.

Picker X-Ray Corporation
New York, New York — **Booth No. 76**

Picker X-Ray Corporation will display the new practical x-ray unit at a popular price—THE METEOR. A patented tilting table top feature provides for rapid and easy conversion from radiography to fluoroscopy in either horizontal or vertical positions.

Professional Management
Battle Creek, Michigan — **Booth No. 82**

PM

Residents and Interns, as well as physicians now in practice, are invited to Booth No. 82 for consultation with PM regarding Office Records—Office Design—Partnership Arrangements—Fees—Locations—Taxes or Estate Problems.

Randolph Surgical Supply Company
Detroit, Michigan — **Booth No. 85**

Randolph Surgical will exhibit outstanding new designs and finishes in doctors' office equipment. On hand to greet our many friends will be the old timers —Harold Stormhafer, Rollie, Cliff Randolph, and a few of our young cubs always.

"For Finer Equipment"

Rystan Company, Inc.
Mount Vernon, New York — **Booth No. 39**

Rystan will exhibit Chloresium Ointment and Chloresium Solution (Plain), which contain the purified, therapeutically active water-soluble derivatives of chlorophyll. They are natural, nontoxic agents for the topical treatment of wounds, burns, ulcers and dermatoses. These biotherapeutic preparations promote the growth of healthy granulation tissue, and deodorize malodorous conditions by inhibiting the action of anaerobic proteolytic bacteria.

Sandoz Chemical Works, Inc.
New York, New York — **Booth No. 69**

Physicians attending the Michigan State Medical Society Convention are cordially invited to visit the Sandoz Pharmaceuticals display which will feature the following:

CAFERGONE—the first effective oral preparation for the treatment of migraine and related headaches.

BELLERGAL—a time-tested preparation for use in functional disorders.

Other products displayed at this Convention are Belladenal, Mesantoin, Dihydroergotamine—D.H.E. 45 and Ipesandrine.

A new handbook listing our products will be available and representatives in attendance will gladly answer any questions about these and other Sandoz products.

W. B. Saunders Company
Philadelphia, Pa. — **Booth No. 2**

We invite all doctors attending the Michigan State Medical Society Meeting to visit our exhibit where we will display a complete line of our books including Bockus' "Postgraduate Gastroenterology," Wolff's "Electrocardiography," Conn's "1950 Current Therapy," Mitchell & Nelson's "Pediatrics," Hauser's "Diseases of the Foot," Janney's "Medical Gynecology," Nesselrod's "Proctology," Friedberg's "Diseases of the Heart," Williams' "Textbooks of Endocrinology," and many other new books and new editions.

Schenley Laboratories, Inc.
Lawrenceburg, Indiana — **Booth No. 57**

Featured at the Schenley Laboratories exhibit are RUTAMINAL, combining rutin, aminophylline and phenobarbital for cardiovascular protection; TITRALAC, the antacid that neutralizes like milk; PENESTHETTES, high potency penicillin lozenges containing benzocaine; SEDAMYL, providing sedation without hypnosis; and VASCUTUM, providing cardiovascular protection for geriatric patients. Qualified personnel present.

Schering Corporation
Bloomfield, New Jersey — **Booth No. 49**

Buccal Tablets of *Oreton, Progynon, Proluton,* and *Cortate* with the exclusively new base, Polyhydrol, will be featured at the Schering exhibit. Polyhydrol makes possible complete absorption of hormones via the buccal route providing advantages of high effectiveness, convenience, and economy. *Trimeton* and *Chlor-Trimeton,* two outstanding antihistamines, and *Coricidin,* Schering's new treatment for the common cold, containing Chlor-Trimeton, aspirin, phenacetin, and caffeine, will highlight the exhibit.

Schering Representatives will be present to welcome you, and will be happy to answer inquiries concerning Schering's new products as well as their other hormone, x-ray diagnostic, chemotherapeutic, and pharmaceutical specialties.

G. D. Searle & Company
Chicago, Illinois — **Booth No. 63**

You are cordially invited to visit the Searle booth where our representatives will be happy to answer any questions regarding Searle Products of Research.

Featured will be Dramamine for the prevention and active treatment of motion sickness; Alidase, for hypodermoclysis; Ruphyllin, for abnormal capillary fragility; Hydryllin, new and effective antihistaminic, as well as such time-proven products as Searle Aminophyllin in all dosage forms, Metamucil, Ketochol, Floraquin, Kiophyllin, Diodoquin, Pavatrine, and Pavatrine with Phenobarbital.

Sharp & Dohme, Inc.
Philadelphia, Pa. — **Booth No. 19**

Visitors are cordially invited to visit the Sharp & Dohme exhibit in Booth No. 19. Stable, portable "Lyovac" Normal Human Plasma irradiated to destroy viral contaminants that might cause homologous serum hepatitis merits your attention. Unusual specialties including "Cremo"-sulfonamides, pleasantly flavored, palatable suspensions of the most effective systemic and enteric sulfonamides, and "Delmor," a delicious nutrient powder, also will be of major interest.

Smith, Kline & French Laboratories
Philadelphia, Pa. — **Booth No. 42**

"Dexamyl"—S.K.F.'s balanced combination of "Dexedrine" Sulfate (dextro-amphetamine sulfate, S.K.F.) and "Amytal" (Amobarbital, Lilly)—is a new prepara-

tion of wide usefulness in everyday practice. Combined in "Dexamyl," "Dexedrine" and "Amytal" work together to provide symptomatic relief from mental and emotional distress.

E. R. Squibb & Sons
New York, New York **Booth No. 75**

Swift & Company
Chicago, Illinois **Booth No. 60**

The original *all-meat* baby foods, Swift's Meats for Babies and Juniors, will be exhibited by Swift & Company. These high-protein, body building foods are available in six varieties, Beef, Lamb, Veal, Pork, Heart, and Liver. These products are also widely used for adult special diets. You are cordially invited to discuss with the Swift representatives the clinical research being conducted on Strained and Junior Meats.

Testagar & Company, Inc.
Detroit, Michigan **Booth No. 31**

The professional service representatives of Testagar & Co., Inc., will be very pleased to welcome their many friends to view many new modern developments in the pharmaceutical field which will be displayed at Booth No. 31. Literature on some of the latest developments in the pharmaceutical field will be available. Vials and ampuls will be displayed, such as Sodium Ascorbate, Testosterone Propionate, Heparin, etc. Requests for samples, literature, or technical information will be welcome.

The Upjohn Company
Kalamazoo, Michigan **Booth No. 66**

The Upjohn exhibit will present the anti-coagulant family: Heparin, Depo-Heparin, and Dicumarol, with particular emphasis placed upon Depo-Heparin.

When heparin is prepared in a gelatin vehicle (Depo-Heparin) and administered intramuscularly, markedly prolonged effects are obtained. A single injection of 1 c.c. (200 mg.) of Depo-Heparin will prolong the blood coagulation time for about twenty-four hours.

U. S. Vitamin Corporation
New York, New York **Booth No. 28**

See the "oil-in-water" demonstration of natural vitamin A oil in water solution . . . a vitamin technical achievement pioneered by the U. S. Vitamin Corporation Research Laboratories.

Also see and taste for yourself the new and different sodium-free salt substitute which actually tastes like salt, looks like salt and sprinkles like salt . . . a great boon to your patients on restricted sodium intake.

VanPelt & Brown, Inc.
Richmond, Virginia **Booth No. 71**

Westinghouse Electric Corporation
Pittsburgh, Pa. **Booth No. 92**

We are going to show a new six-section Fluorothin Illuminator, arranged "three-over-three" on a stand, on which will be displayed a series of translites of the various types of x-ray equipment which we manufacture. We will also show one of our new non-corrosive single-section illuminators with wet film hanger and drip tray, which has been especially developed to withstand the corrosive effect of developing solutions for use in the darkroom. Of course, we will also have chairs and ashstands, and the Westinghouse draped background hanging.

White Laboratories, Inc.
Newark, New Jersey **Booth No. 48**

White Laboratories, Inc., will have an interesting and unusual display—the latest products of White's research. Courteous Medical Service Representatives in attendance will appreciate the opportunity to discuss with you the clinical background and therapeutic merit of these and other White's products. You are cordially invited to visit this booth.

Winthrop-Stearns, Inc.
New York, New York **Booth No. 94**

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Committee Annual Reports

ANNUAL REPORT OF THE COUNCIL 1949-1950

The Council had three sessions of nine days and the Executive Committee convened nine times (to September 17, 1950), a total of twelve meetings up to the 1950 Annual Session of the Michigan State Medical Society. All matters studied and recommendations made by The Council's thirty Committees as well as the Society's twenty-three Committees and all business of the Society were referred to The Council or to its Executive Committee for consideration and action. The "all-day" sessions scheduled by the Executive Committee for its monthly meetings during the past year resulted in the expeditious handling of the greatly increased business of the State Society. A total of 122 hours—over 15 working days of 8 hours each—was spent by members of The Council and of the Executive Committee at these meetings during the past year—which total does not include the hours spent going to and returning from the meeting places, scheduled in various parts of the State.

Membership

Members of the State Medical Society as of July 1 and as of December 31, from 1935 to 1950, are indicated in the following chart:

	1950	1949	1948	1946	1944	1940	1935
July 1	4881	4455	4645	4461	4615	4401	3410
December 31		4971	4960	4799	4702	4527	3653

The figures for 1950 include 4,514 active members, 230 Emeritus and Life members, 16 Retired Members, and 121 Associate Members.

The MSMS membership was at an all-time high as of December 31, 1949.

Finances

As in the past, the first item of new business on the monthly agenda of The Council or its Executive Committee is "Study of Monthly Financial Reports." Every thirty days, therefore, the Society's financial picture is reviewed and governing policies established.

The Ernst & Ernst report for 1949 plus the budgets of the Society for 1950 were published in JMSMS, March Number, beginning on page 358. Members are invited to acquaint themselves with the financial status of their State Medical Society and to offer suggestions; these will be truly appreciated.

As of June 30, 1950, 4,514 members paid Society dues amounting to $69,904.94. This was on the basis of $17.00 per member inasmuch as The Council allocated an additional $5.00 from the special assessment to cover an anticipated deficit in the General Fund. *The $12.00 dues are not sufficient to finance the General Fund activities.*

The balance of the $25.00 Special Assessment (or $20.00 per member) has provided $90,200.00 for Public Education Activities.

The Public Education Budget for 1950 amounted to $57,340.00. The 1950 budget of the Public Education Reserve Fund (CAP—Special Committee on Education) amounted to $48,900.00. As budgeted and planned for the present emergency, expenditures for the remainder of the year will deplete the Public Education Reserve Fund. However, the CAP Planning Committee has some suggestions by which certain expenditures may be curtailed to show a balance of approximately $55,000.00 in the Public Education Activities account on December 31, 1950. This could be earmarked for a future emergency reserve.

A brief financial résumé of each of the MSMS activities to July 1, 1950, is herewith presented:

	On Hand 1/1/50	Income to 7/1/50	Expenses to 7/1/50	Balance on Hand 7/1/50
General Fund	$57,803.59	$70,145.30	$39,812.43	$88,136.46
Public Education Activities	35,238.62	91,976.25	32,886.64	94,328.23
Public Education Reserve Fund	33,254.46		20,748.30	12,506.16
The Journal		30,837.68	23,045.64	7,792.04
Annual Session (1950)		17,952.00	2,324.44	15,627.56
P. G. Institute (1950)		9,000.00	8,506.65	493.35
Rheumatic Fever Control	28,887.97	2,250.00	9,566.69	21,571.28

The AMA dues collected by county medical societies and forwarded to the American Medical Association during the six months to June 30, 1950, totaled $107,450. MSMS decided in April that it would assign to its county medical societies the collection fee (10c per member) for AMA dues transmitted to Chicago in 1950.

A résumé of the financial condition of the Michigan State Medical Society, as of August 31, 1950, will be presented to the House of Delegates at its opening session of September 18, 1950—as part of The Council's Supplemental Report.

The Journal

The Journal of the Michigan State Medical Society is finishing forty-nine years of service. During all this time, it has continuously acted as a medium of information for scientific medicine to our members. Many outstanding contributions have been given through its pages. It also has been a means of keeping the members informed of medico-sociologic and economic problems. It is the voice of the organized medical profession of Michigan, speaking to its members and to society in general. The Journal has defended the theory of the private practice of medicine as opposed to the policy of bureaucratic or governmental medicine.

In recent years approximately 1500 or 1600 pages have been published annually. The Journal has adopted the policy of devoting each issue to some outstanding medical activity or the work of some one of our major programs. For several years, no two covers have been alike. In May of this year, the Centennial of the University of Michigan Medical School was featured and the pictures of six of the stalwarts who established that school were published. This number also devoted considerable space to Michigan's Foremost Family Physician of the year, Dr. John C. Maxwell of Paw Paw.

The covers for The Journal will continue to express the motives and accomplishments of our Society. A number of scientific editorials were published but The Council and the Publication Committee felt that the most important service we could give to our members and to our country is to fight socialism at every opportunity. We propose to continue along these lines. We believe Michigan's efforts have helped materially to delay Socialized Medicine, the first step in National Socialism.

In the July issue of The Journal, we experimented with a new feature which will shorten the time between the preparation of material and its distribution in The Journal. There were four pages bound in the center of The Journal in vari-type and on buff colored paper—two pages devoted to the very latest information from Michigan Medical Service, our Blue Cross-Blue Shield activity, and two pages devoted to the Public Relations Department of the Society with special reference to our Good Citizenship Campaign.

Organization

1. Organization among the fifty-five component societies is satisfactory. Especially to be commended are the high quality scientific postgraduate "clinic days" being

offered by county and district medical societies annually including: Bay, Calhoun, Grand Traverse, Genesee, Ingham, Jackson, Kent, St. Clair, and Wayne Counties and by the Upper Peninsula Medical Society.

2. The County Secretaries-Public Relations Conference of January 22, 1950, in Detroit further stimulated Michigan's CAP Program, which proves to be our most effective weapon against the propaganda for political medicine. Michigan's "Good Citizenship Campaign" was inaugurated at a meeting of CAP Leaders in Lansing on May 7.

3. During the past year, a new feature in organization was begun: press conferences in the various Councilor Districts. Friendly meetings were held of newspaper editors and radio executives with officers of the state and local county medical societies. These conversations generated mutual understanding and greater co-operation. (See "Public Relations," below.)

4. The fourth Michigan Postgraduate Clinical Institute was held in Detroit March 8-9-10, 1950, and resulted in a record registration of 1,875, as well as thousands of lines of excellent publicity in Detroit and Michigan newspapers. The Institute is becoming more popular and valuable with the years.

5. An organization of state medical society legal counsels was developed, through the efforts of the MSMS Legal Counsel, at the American Medical Association's Washington, D. C., Interim Session, December 1949; elected chairman of the new group, our Legal Counsel J. Joseph Herbert presided over the second meeting of these legal counsels at the AMA San Francisco Session, June, 1950, and was re-elected chairman for 1951.

6. An MSMS Mediation Committee was appointed, and stimulation for appointment of county medical society mediation committees was effected during the past year. The function of these committees is to investigate and adjudicate alleged breaches of medical public relations—matters irritating to the public but not sufficiently serious to require the attention of an ethics committee.

7. F.B.I. The Federal Bureau of Investigation sent an inspector to the Executive Offices of the Michigan State Medical Society in the autumn of 1949 to study the record books of The Council and its Executive Committee; no reason for this investigation was given, but similar and more extensive investigations of the American Medical Association and other state medical societies were held simultaneously. It may be significant that these visits occurred shortly after members of various medical organizations of the United States urged Congress to veto the President's Reorganization Plan No. 1.

8. The joint meetings of Michigan's Delegates to the AMA with the Executive Committee of The Council, held just before the June and December Sessions of our parent organization, were continued during the past year, to discuss all matters that might be considered by our representatives in the AMA House of Delegates.

9. H. B. Zemmer, M.D., Lapeer, was appointed Councilor of the Seventh District on September 18, 1949, to serve the unexpired term of the late T. E. DeGurse, M.D.

Public Relations Program

Michigan's leadership in the field of medical public relations continues to point the way to others as the entire profession of the country accepts the challenge presented by rabid proponents of socialized medicine.

In 1950 the Michigan medical profession was forced by powerful circumstances to undertake civic action and community leadership which a few years ago would have been quite remote from the thoughts of many doctors of medicine. In the MSMS planning, this action took the tangible form of a "Good Citizenship Campaign" as a focal point of the CAP (Co-operation with the American People) program. In addition, the general public relations program was carried on with increased enthusiasm.

The following are highlights of 1950:

The "Good Citizenship Campaign"

The plan to stimulate good citizenship through maximum registration and voting by all eligible citizens was conceived at a series of planning meetings and outlined to CAP Leaders in Lansing, May 7. In essence the plan utilizes the existing CAP organization for the purpose of carrying out the principal tenets of good citizenship among doctors, their families, professional staff, patients and friends.

As in previous CAP operations, the individual doctor is made responsible for the informing of a number of friends and patients about the responsibilities and advantages of good citizenship.

The "Good Citizenship Campaign" began on May 7—it will continue through November 7. The following is a compilation of results to date:

(a) Every member of the MSMS, his family, professional staff and "lists of 20" have been urged to register for participation in the autumn elections. A conservative estimate of the numbers that can be reached is 150,000.

(b) Stimulus and motivation were supplied to two score civic and business associations with the result that many new and effective ideas sparked the campaign to "Get Out The Vote." It is impossible to ascertain the public contacts made through these organizations although they have memberships totaling some 1,500,000 persons. (Example: Hotelmen throughout Michigan will use upwards of 10,000,000 table napkins telling in cartoon and slogan the need for registration and voting; milk bottle collars will carry the same message to an equal number or more.)

(c) Approximately 500,000 registration and voting reminders in the form of penny postal cards were made by MSMS members in the course of a "Card-A-Day" campaign.

(d) Individual easel calendars were distributed to the MSMS membership. The calendars carried separate "Good Citizenship" illustrated memos totalling 30,000 printed impressions for use on reception room desks.

(e) The "Hour Glass" campaign against socialized medicine was utilized in the vote project through adaptation of the theme to "It Takes Less Than 3 Minutes to Vote." This idea has spread throughout the country.

(f) Special two-page supplements were used in the JMSMS to record the month-by-month progress of the campaign.

(g) Special news releases and feature stories were written in connection with the doctors' campaign.

(h) The "Tell Me, Doctor" radio series of MSMS carried daily reminders telling listeners to register and to vote.

(i) A constant stream of letters and three newspaper-style bulletins were prepared for distribution to each MSMS member.

The CAP Plan

This program, first developed in 1948 continued to educate profession and laity in matters pertaining to socio-economic problems. In addition to its main force directed into the "Good Citizenship Campaign," the following activities can be noted:

(a) Over 105,000 Michigan citizens have written personal letters or wired their Congressional representatives.

(b) Some 301 Michigan organizations have passed resolutions concerning socialized medicine.

(c) MSMS members have made over 1,753 speeches and talks to medical and lay audiences.

(d) Campaign materials totaling 3,684,750 have been distributed to doctors of medicine and citizens of Michigan.

(e) The Public Relations Field Secretaries (3) made personal calls on 1,592 doctors of medicine and lay persons, attended 352 meetings, organized 104 meetings, gave 319 speeches, traveled more than 60,163 miles in the performance of their assignments.

(f) "To Your Health," second MSMS movie and dealing with socialized medicine has been scheduled in

243 Michigan theaters to date and shown in 149 to over 75,000 persons. In addition, it has been released in some communities for controlled group showings.

(g) Four CAP Bulletins totalling more than 20,000 copies were prepared and mailed to all MSMS members.

(h) Five legislative bulletins (5,105 copies) were mailed to key leaders.

(i) Seventeen District CAP meetings were held with innumerable County CAP Committee meetings called on the county level.

(j) Four large Conferences were organized and held, while MSMS representatives were active participants in eight national meetings.

(k) Hundreds of local meetings were held with ancillary groups interested in health problems.

(l) Aid and assistance was given numerous state and county medical societies throughout the United States.

(m) Four new MSMS publications were authorized and printed in the amount of 195,000 copies. The Speakers Manual, a 108 page compendium of information relative to speaking on socialized medicine, was sent to all state medical societies as well as to several thousand Michigan doctors and lay speakers.

General Public Relations

Newspapers: Feature and news releases were issued routinely throughout the year, with the 450 weekly clipping return a testimonial to the effectiveness of the copy and to the splendid understanding and co-operation of the editors of our daily and weekly newspapers of Michigan.

All state daily and weekly editors were surveyed to determine the method preferred for receipt of text and picture story.

A series of ten press-radio dinner conferences were held in strategic spots throughout the state resulting in an increased understanding between press and profession.

Concerted publicity campaigns were conducted on the occasion of the MSMS Annual Session in September and the Michigan Postgraduate Clinical Institute in March.

Cinema: "Lucky Junior," first MSMS production, has nearly completed its commercial run and is now being used at smaller group meetings.

A series of short films designed for medical society and hospital staff meetings was also begun. Plans call for a series of six films.

Radio: Six Michigan stations were added to the number previously carrying "Tell Me, Doctor." Requests to purchase the series were received from eight states and the Dominion of Canada. This popular series, only daily medical program in America, passed its 1,000th broadcast this year.

Special broadcasts were carried on many Michigan stations throughout the year.

Every MSMS news release was automatically mailed to every Michigan station for use in news broadcasts.

Publications: In addition to the four new pamphlets published during this year, several of those from last year are still being reprinted. One of the most popular is the Medical Associates booklet entitled "In Planning Your Career."

A series of articles in The Journal of the MSMS detailed how the various PR media could be used on county medical society levels.

Parade magazine carried an article on Michigan Medicine which reached 12,000,000 readers.

Organizational: (a) Aid was given the Michigan Health Council as it reached a new position of leadership among Michigan health groups.

(b) Assistance was also given the Committee on Rural Health, the Michigan Rural Health Conference, Rheumatic Fever Control, Cancer Control, Diabetes Control group, Health Survey Advisory, Commission on Health Care, Scientific Radio, and Industrial Health.

Legislative Activity: Eight bills and resolutions dealing with medicine and health were introduced in the Extraordinary (1950) Session of the Michigan Legislature. (See Legislative Committee Report.)

The State Society especially urged passage of resolutions and bills to increase financial aid to Michigan's two medical schools (see report of Committee on Increase of Medical Students Graduated from Michigan Medical Schools).

Woman's Auxiliary. The Woman's Auxiliary proved to be a potent factor in the success of the CAP and "Good Citizenship Campaign" efforts. This group published three bulletins for its membership and took an active effective part in many activities of a public relations nature including the CAP Program and the Good Citizenship Campaign.

Contacts with Governmental Agencies

The amazing growth of contacts between the Michigan State Medical Society and governmental agencies has been especially marked during the past year. Chief among these were:

1. Michigan Day in Washington, D. C. Pursuant to instructions of the House of Delegates, The Council again dispatched MSMS representatives to Washington, D. C., on the occasion of "Michigan Day" sponsored by the U. S. Chamber of Commerce on May 1-2-3, 1950. These personal contacts foster much goodwill.

2. Michigan State Board of Registration in Medicine. A joint committee with this Board, to study proposed changes in the medical practice act, was active during the past year. (See Annual Report of Joint Committee to Study Medical Practice Act.)

3. Michigan State Health Department. Mutual problems continue to be solved through fine understanding between this Department and MSMS. Important matters discussed during the past year included a hearing conservation program; compulsory reporting of communicable diseases; legislative bill to increase financial aid to health departments; and recommendations for hospital nurseries and for hospital maternity departments (these last two items are covered in Annual Report of Advisory Committee to Bureau of Maternal and Child Welfare). State Health Commissioner A. E. Heustis, M.D., deserves commendation for his understanding of practitioners' problems and his diplomatic administration of a pressure-ridden position.

4. Department of Public Instruction. Upon request, three MSMS advisory committees aided the Superintendent of Public Instruction with a re-evaluation of the curricula of schools for training of medical aides diagnostic service for mentally handicapped children; curricula of schools for G.I. training. (See Annual Reports of these Committees.)

5. Michigan State College. The Rural Health Survey, sponsored jointly by MSMS and Michigan State College, was concluded during the past year (see Annual Report of Advisory Committee on Rural Health Survey).

6. University of Michigan. The medical-socio-economic lectures, for seniors in the University of Michigan Medical School, delivered by MSMS members, were continued during the past year (see Annual Report of Committee).

MSMS used its influence to gain additional funds for the University of Michigan Medical School building program in order to increase the number of medical graduates in this state.

The University of Michigan Hospital admission policy was the subject of discussion at several meetings of the Executive Committee and at The Council meeting of July, with the subject still under advisement.

The University of Michigan Medical School Centenary was celebrated not only by dedicating the May Number of JMSMS to this event, but also by setting aside a special page of the Annual Session Program as well as the presentation of a scroll to officials of the University of Michigan during the MSMS Annual Session in Detroit on September 20, 1950.

7. Wayne University College of Medicine. The med-

ical-socio-economic courses continue to be given at Wayne by members of the MSMS.

MSMS used its influence to secure an appropriation to draft plans for a new science building for Wayne University College of Medicine.

8. Michigan Department of Social Welfare. MSMS aided this Department in developing its post-pay plan for medical care to old age recipients. Fine co-operation between MSMS and this State Department continues to be maintained; the administration of W. J. Maxey, Director of the Social Welfare Department, is to be commended.

9. The Michigan Crippled Children Commission and its Medical Director Carleton Dean, M.D., continued their fine mutual relationship with the State Society during the past twelve months in the face of difficult administrative problems. Praiseworthy is the Commission's co-operative work in the Michigan Rheumatic Fever Control Program.

The Council went on record as favoring the present MCCC standards of physicians and surgeons caring for afflicted and crippled children and felt that, until such time as study is made by a disinterested research organization of the courses of study and training of the various schools of healing as compared to that of Doctors of Medicine, no change should be made in the regulations governing care of afflicted and crippled children.

10. Contacts with Governor's Office. Primary contact was in connection with the Governor's Commission on Sex Deviates (to which Commission R. W. Waggoner, M.D., Ann Arbor, was appointed, at the request of MSMS); and also in connection with appointments to state boards and commissions dealing with medical and health care.

11. Michigan Civil Service Commission. MSMS was invited to send a committee to Grand Rapids to conduct a survey of medical service available in the Michigan State Veterans Facility, which invitation was accepted; the study is now being pursued.

12. Michigan Attorney General. Several opinions affecting the medical-hospital professions were rendered by Attorney General Stephen J. Roth during the past year, particularly one having to do with limitations on regulations concerning staff memberships (Grand View Hospital in Ironwood). The MSMS Legal Counsel stated that this opinion, based on the County Hospital Act, was proper and he felt that only an amendment in the law would change the present situation.

Contacts with Voluntary Agencies and Organizations

1. Michigan Medical Service. Higher income limits, more benefits to subscribers, and an increased fee schedule were subjects discussed by the 1949 MSMS House of Delegates, and this study was continued during the past year by the MSMS Committee to Study Health Plans. (See Annual Report of this Committee.)

Michigan Medical Service—ten years old—continues to serve the medical profession and the public of this State and to maintain its proud position as one of the world's largest voluntary health and medical service programs. A full report on Michigan Medical Service and its financial position will be presented to members of that corporation on Tuesday, September 19, 1950, at 2:00 p.m., Grand Ballroom, Book-Cadillac Hotel, Detroit, at which MMS President R. L. Novy, M.D., urges all to be present.

2. Michigan Hospital Service is in its eleventh year of service to the people of Michigan. Periodic reports on MHS and its financial position were presented to the MSMS Council by E. D. Barnett, M.D., its President.

3. Michigan Heart Association. This youthful health organization has in two years assumed its rightful place of leadership in Michigan medical circles, thanks to the energies of Presidents W. B. Cooksey, M.D., Paul S. Barker, M.D., and others on its effective Board of Trustees. The MSMS gave aid in the annual campaigns of the American (and Michigan Heart Association) the Michigan Society for Crippled Children and Adults, Inc., and of the Arthritis and Rheumatism Foundation to help achieve their top goals for effective work in heart, rheumatic fever, and arthritis and rheumatism during the year. The State Society is grateful to the Michigan Heart Association for its continued generous grant towards the maintenance of the Michigan Rheumatic Fever Control Program. It also expresses gratitude for contributions to this same life-saving activity received from the Michigan Chapter, Arthritis and Rheumatism Foundation, and from the Michigan Society for Crippled Children and Adults, Inc.

4. Michigan Health Council. This Council is making splendid progress in its development of community health councils and in the issuance of its Handbook of Health Agencies in Michigan; MSMS co-operated with the MHC and with the Michigan Foundation for Medical and Health Education, Inc., in the sponsorship of the annual Michigan Rural Health Conference, and also in the study of the Brookings Institution on "Availability of Medical Service in the United States" in which Michigan has been selected as one of four states for an industrial medical care survey.

5. State Bar of Michigan. Cordial relationships continue between MSMS and the State Bar, with annual joint meetings of the executive committees of the two associations; more recently, the State Bar's Jurisprudence Committee has requested MSMS to appoint a liaison committee for joint study of mutual endeavors, particularly the sex deviate problem.

6. American Academy of General Practice. Contacts were made with this recently formed organization in connection with general practice training prior to specialty training and work, inasmuch as The Council is sympathetic to the idea of requiring a number of years of general practice prior to specialty training and feels that steps toward initiating this action should be taken through the AAGP.

7. Other voluntary groups contacted include the American Public Health Association, the Michigan Foundation for Medical and Health Education, Inc., the Michigan Farm Bureau, the Research Council for Economic Security, the Michigan Nursing Center Association, the Michigan State Pharmaceutical Association, the United States Pharmacopoeia Convention, and the Conference of Physicians and Schools.

8. American Medical Association. The Council again expresses appreciation to the American Medical Association for the work it is doing in behalf of the medical profession and the individual doctors of medicine of the country. During the past year the officers and component county medical societies of the Michigan State Medical Society have co-operated actively in the projects of the American Medical Association, the work of its various Councils and Bureaus, in its "Grass Roots" Conference, its National Rural Health Conference, its Medical Society Executives Conference, etc.

Committees

A total of 102 meetings of Committees of the Michigan State Medical Society and of The Council were held during the ten month period ending August 1, 1950. The progressive accomplishments attained by MSMS are the result of work of these active groups—best portrayed in the enlightening annual reports of the Committees. Sincere gratitude is expressed to the chairmen and members of these Committees for their contribution of valuable time and sincere effort willingly given in behalf of all the medical practitioners of the state. Especially active during the past twelve months were:

1. The Committee on Scientific Work which arranged the excellent program for the 1950 Annual Session. The many months of preparation spent by this planning committee will result in an excellent three-day postgraduate course that will be enjoyed by approximately 3,600 doctors of medicine who visit Detroit in September.

2. The Public Relations Committee and the Special Committee on Education spear-headed the medical profession's program for voluntary health insurance and the preservation of our American way of life based on the private enterprise system. All the activities of these two hard-working Committees were developed in close co-operation with The Council and its Executive Committee which scrutinized carefully, every month, the plans and expenditures of the Public Relations Department (see Annual Reports of these two Committees).

3. The scientific committees especially active were the Rheumatic Fever Control Committee, the Maternal Health Committee, the Mental Hygiene Committee, the Cancer Control Committee, the Scientific Radio Committee, the Committee on Venereal Disease Control, the Postgraduate Medical Education Committee, and the Industrial Health Committee (see individual Annual Reports of these Committees).

4. The Committee on Emergency Medical Service was swept into increased activity in recent months. The well-considered recommendations of the Chairman of this Committee, presented to the Executive Committee on June 14, were deemed of such importance that they were transmitted to the Governor for his approval prior to implementation.

MSMS representatives were sent to the National Emergency Medical Service Conference in Chicago in March and to attend a course in "Medical Aspects of Atomic Warfare" held at Western Reserve University, Cleveland, the week of April 3.

5. Committee on Atomic and Allied Procedures. This new Committee held its organizational meeting July 10. The three subcommittees appointed indicate the extent of the studies being pursued by this pioneering group of specialists: (a) Medical Uses of Atomic Energy; (b) Industrial Uses and Hazards of Atomic Energy; and (c) Medical and Technical Defense in Modern Scientific Warfare.

6. The Special Committee on Mental and Social Problems was especially active during the past year (see Annual Report of this committee).

7. The Legislative Committee had three months' work during the special sessions of the Legislature (1950). Thanks are due Committee Chairman L. A. Drolett, M.D., Lansing, who made himself available at all hours to attend sessions of the Legislature and its numerous committees (see Annual Report of Legislative Committee).

Miscellaneous

1. New building for MSMS. At every session of The Council and meeting of its Executive Committee, this subject was discussed and reports on available space in Lansing were presented.

The inflated prices of the few available buildings and homes adequate for housing the MSMS Executive Offices have discouraged The Council from immediate action. It is hoped that its continued investigation will lead eventually to the procurement of adequate and dignified quarters in the Capital City for use as headquarters of the MSMS.

Meanwhile, the crowded condition in the Executive Offices has resulted in untold stress and strain upon the MSMS employed personnel who deserve a vote of commendation for their forbearance as well as for their devotion to duty. They have assumed with energy and enthusiasm the burdens of increased organization detail, in spite of a crammed situation where efficiency is almost a miracle.

Matters Referred to the Council by 1949 House of Delegates

1. *Resolution re reorganization of American Medical Association.* Shortly after this resolution was adopted by the House of Delegates in September 1949, the situation at the AMA was radically changed and The Council felt that "in view of the action already taken and further action contemplated at 535 N. Dearborn, that the resolution should not be presented at the present time to the House of Delegates of the AMA and that further progress in efforts of the AMA to reorganize should be watched."

The progressiveness of the AMA, under its present officers and personnel, is markedly obvious; moreover, the beneficial results therefrom already are apparent—one has but to look at the increased membership in the AMA to realize the favorable change in attitude toward the AMA now taken by the medical profession generally.

2. *Resolution re dispensing of eye glasses.* Upon instruction, this resolution was referred to the Judicial Council of the AMA. The following report comes from W. D. Barrett, M.D., Chairman of the MSMS Delegation to the AMA House of Delegates: "The AMA Judicial Council would not take any further action, feeling that the principles of ethics of the AMA as written were self-explanatory in this matter."

3. *Study of Councilor Districts.* The Council referred this subject to a Special Committee to Study Councilor Districts composed of B. R. Corbus, M.D., Chairman, Grand Rapids, A. S. Brunk, M.D., Detroit, H. H. Cummings, M.D., Ann Arbor, L. J. Hirschman, M.D., Detroit, W. H. Huron, M.D., Iron Mountain, C. R. Keyport, M.D., Grayling, R. S. Morrish, M.D., Flint, E. F. Sladek, M.D., Traverse City, and P. R. Urmston, M.D., Bay City. This Committee gave serious study to the matter and presented its findings, including various charts showing the present MSMS Councilor Districts and their striking similarity to the medical trading areas, etc., of the state, to the Executive Committee of The Council on February 8. The report of the Committee, in which The Council concurs, will be presented to the House of Delegates on September 18 by Dr. Corbus, Chairman of the Committee.

4. *Consultation of Doctors of Medicine with other healers.* This subject was referred to a Commission on Healing Arts composed of J. S. DeTar, M.D., Chairman, Milan, R. H. Baker, M.D., Pontiac, W. E. Barstow, M.D., St. Louis, B. R. Corbus, M.D., Grand Rapids, Carleton Dean, M.D., Lansing, H. F. Dibble, M.D., Detroit, J. E. Livesay, M.D., Flint, H. L. Morris, M.D., Detroit, R. H. Pino, M.D., Detroit, R. F. Salot, M.D., Mt. Clemens, E. F. Sladek, M.D., Traverse City, C. E. Umphrey, M.D., Detroit, and Mr. J. Joseph Herbert, Manistique. The Committee held numerous meetings, out of which came a majority report and three minority reports. These will be presented to the House of Delegates on September 18 by Dr. DeTar, Chairman.

Recommendations

The Council recommends:

1. That each and every member of the MSMS continue to co-operate wholeheartedly, both by individual action and financially, to aid the AMA and its National Education Campaign in a program of active and direct resistance against any attempt to throw the practice of medicine into politics. The past loyalty of Michigan's medical men toward the AMA is highly commended. Michigan stands in the forefront of those states whose voluntary help to our parent organization is near the 100 per cent mark.

2. That representatives of the MSMS be instructed to continue their yearly visit to Washington, D. C., on the occasion of Michigan Day sponsored by the U. S. Chamber of Commerce.

3. That newspaper and magazine editors and feature writers who have and are publishing splendid articles, factual news stories and strong editorials against socialism, be sent official letters of commendation.

4. That the By-Laws be changed so that the word "Consecutive" in the section on Life Membership (Chapter 5, Section 7) is deleted.

5. That the MSMS co-operate in a national con-

ference on state and community health leadership, proposed for Detroit in the autumn of 1950, under the sponsorship of the AMA and the MSMS.

6. That the annual dues of the Michigan State Medical Society be increased sufficiently to provide necessary appropriations to the MSMS General Fund and for the various purposes in the work of the Michigan State Medical Society.

Respectfully submitted,

O. O. Beck, M.D., *Chairman*
R. J. Hubbell, M.D., *Vice Chairman*
L. W. Hull, M.D.
P. A. Riley, M.D.
Wilfred Haughey, M.D.
J. D. Miller, M.D.
R. C. Pochert, M.D.
H. B. Zemmer, M.D.
L. C. Harvie, M.D.
E. A. Oakes, M.D.
F. H. Drummond, M.D.
C. A. Paukstis, M.D.
A. H. Miller, M.D.
W. S. Jones, M.D.
J. S. DeTar, M.D.
E. A. Osius, M.D.
W. B. Harm, M.D.
William Bromme, M.D.
R. H. Baker, M.D., *Speaker*
W. E. Barstow, M.D., *President*
C. E. Umphrey, M.D., *President-Elect*
L. Fernald Foster, M.D., *Secretary*
A. S. Brunk, M.D., *Treasurer*
E. F. Sladek, M.D., *Immediate Past President*

ANNUAL REPORT OF LIAISON COMMITTEE WITH UNIVERSITY OF MICHIGAN PRESIDENT, 1949-50

No meeting of the Liaison Committee was held during the past year, as conflicts at the University of Michigan made it impossible to schedule a meeting until the autumn of 1950. It is hoped that this meeting will be held early in October.

Respectfully submitted,

E. I. Carr, M.D., *President*
L. Fernald Foster, M.D.
W. E. Barstow, M.D.

ANNUAL REPORT OF THE COMMITTEE ON RURAL MEDICAL SERVICE, 1949-50

This Committee has met twice during the year and has attempted to keep constantly in touch with progress of affairs affecting rural medical service.

The membership of the Committee is being enlarged so that it is more representative of the State and with those groups concerned particularly with rural health.

Community Health Councils have been of much interest to the Committee and have received a good deal of attention in its discussions. The Committee feels that support of these Health Councils is important and works very closely with the Michigan Health Council in forwarding this project.

The Committee also went on record as favoring the establishment of community health centers, which would include a building with a small number of hospital beds, together with other necessary facilities, so that a community could have some attraction for a doctor of medicine to practice in a particular area.

The Rural Health Committee has been very much interested in, and has lent its support to, the annual Michigan Rural Health Conference.

The Michigan Health Survey, which was carried out under the auspices of the Michigan State Medical Society and the Michigan State College, has been reviewed by this Committee and by its advisory committee for this survey, and a report on this matter will be forwarded soon.

The Chairman of this Committee attended the National Rural Health Conference in Kansas City and wishes to report a very healthy interest in this problem throughout the county, and a crystallization of some of the needs that are present and manner of fulfilling these needs.

Respectfully submitted,

R. J. Hubbell, M. D., *Chairman*
J. S. DeTar, M.D.
O. R. MacKenzie, M.D.
J. R. Rodger, M.D.
H. B. Zemmer, M.D.

ANNUAL REPORT OF THE COMMITTEE ON NATIONAL EMERGENCY MEDICAL SERVICE, 1949-50

This Committee has had no formal meetings during the past year. Members of the Committee have been active in attending conferences with the Governor and a meeting of the Council on Emergency Medical Service at AMA Headquarters.

Respectfully submitted,

H. F. Becker, M.D., *Chairman*
W. H. Alexander, M.D.
W. H. Gordon, M.D.
R. F. Hague, M.D.
S. W. Hartwell, M.D.
J. A. Ramsey, M.D.
C. E. Umphrey, M.D.

ANNUAL REPORT OF ETHICS COMMITTEE, 1949-50

During the past year the Ethics Committee has had no problems referred to it pertaining to medical ethics; consequently there have been no meetings of this committee.

Respectfully submitted,

R. S. Morrish, M.D., *Chairman*
D. C. Eisele, M.D.
W. L. Harrigan, M.D.
L. C. Harvie, M.D.
H. B. Hoffman, M.D.
G. B. Hoops, M.D.
L. J. Morand, M.D.
W. E. Nesbitt, M.D.

ANNUAL REPORT OF THE SPECIAL COMMITTEE ON EDUCATION, 1949-50

1. *Policy and Emphasis:* The program of the Committee was designed this year to emphasize to the people broad dangers in the field of socialism using Socialized Medicine as a prime example.

With this as the basis of thought and action the development of the horizontal portion of the C.A.P. plan had number one priority. Good progress has been made along these lines on the state level. Although it is difficult to assay the total activity of the work done on the local level, indications of such work has been most salutory.

At the present time a wide variety of organizations who are intensely interested in the battle to keep America the citadel of "freedom from compulsion" are working together. The work of the medical profession has been in no small measure responsible for bringing this to pass.

The Committee has had occasion during its deliberations of the past twelve months to weigh the ideas and

suggestions of many individuals, both within the medical profession and from other walks of life. The contributions made by these persons coupled with the previous organization work have helped to keep the C.A.P. program virile and active.

2. *Organizational:* The implementation of the horizontal phases of the C.A.P. program was carried forward through the medium of meetings, state and national, which are described below:

a. *Special Committee on Education:* This Committee met on an average of once each month for the purpose of reviewing progress of the plan as well as for making recommendations for the future.

b. *MSMS Executive Committee:* Monthly reports were made to this committee with the members either approving or rejecting proposed items of action in the C.A.P. plan. The monthly reports were detailed and included estimates of costs for the various projects in order that all activities might have official sanction of the Executive Committee.

c. *District Meetings:* District meetings for the development of Speakers Bureaus on local Councilor District levels were held during October, November and December in the following cities: Battle Creek, Ludington, Kalamazoo, Traverse City, Sault Ste. Marie, Powers, Houghton, Marquette, Detroit, Ann Arbor, Marlette, Flint, Bloomfield Hills, Jackson, Grand Rapids, Bay City and Saginaw.

The above meetings were dinner meetings and followed the same format with regard to program. Each meeting had the added benefit of a professional speech instructor for the purpose of specific public speaking instruction.

Attendance at these meetings averaged twenty-five with the highest being fifty and the lowest six.

d. *County C.A.P. Meetings:* C.A.P. meetings on the county level were held at regular intervals to insure a continued activity and enthusiasm on the part of all workers. While it is difficult to estimate the total number of meetings thus held, most C.A.P. committees have met at intervals of at least once per month—and in some societies, once per week.

e. *Press Conferences:* In the belief that improved public relations of the medical profession would result from general meetings with press and radio representatives, a pilot meeting was held in Bay City on January 17, 1950. Comment and constructive suggestions made at this meeting provided the basis for the series of similar press conferences held in the following cities: Bay City, Midland, Traverse City, Grand Rapids, Kalamazoo, Flint, Detroit, Ann Arbor and Pontiac.

The overall reaction to this series of meetings resulted in renewed plans of cooperation between press and medicine.

Attendance at these meetings averaged fifty persons with a breakdown of approximately 75 per cent press and radio representatives and 25 per cent medical profession.

f. *With Other Committees:* Members of the Special Committee on Education were active participants in the deliberations of the MSMS Legislative and Public Relation Committees held at periodic intervals throughout the year.

g. *Meetings, Other:* The following meetings were in addition to those listed above:

(1) *Secretaries and Public Relations Conference:* Featuring Michigan congressmen and other celebrities this January 22 meeting became the keynote gathering for key leaders of the MSMS and emphasis began on the "Americanism" theme of the C.A.P. program.

(2) *Speakers Conference:* This meeting held during the 1949 Annual Session in Grand Rapids featuring Prof. Paul Bagwell proved the stimulus for the series of Speakers Bureau district meetings which followed.

Approximately 100 active C.A.P. workers attended the conference.

(3) *C.A.P. Freedom Builders Show:* This kickoff meeting for the Good Citizenship Campaign which is described in detail later in this report provided the initial punch for a campaign which tends to be the most important yet attempted by MSMS.

Held in the Hotel Olds, Lansing, May 7 the gathering attracted over 100 of the top C.A.P. leaders in Medical Society and Auxiliary.

(4) *Upper Peninsula C.A.P. Meeting:* Counterpart of the May 7 rally this June 23 meeting added additional emphasis on "Good Citizenship Campaign" for MSMS members of Upper Michigan.

Approximately forty-five persons attended this dinner meeting.

(5) *Meetings with Ancillary Groups*: Innumerable meetings were held with representatives of organizations closely allied in health fields. (See Item 10-c of this report.)

(6) *National Meetings:* Progress and plans formulated by this Committee were presented at the following national meetings:

(a) AMA Public Relations Conference
(b) AMA Interim Session
(c) National Conference of Legal Counsels
(d) AMA National Education Campaign Conference
(e) National Rural Health Conference
(f) National Conference on Medical Service
(g) Seventh National Conference of Medical Society Officers
(h) Medical Society Executives Conference

3. *Personal Contact:* The values and extent to which personal contact played a role in the furtherance of the C.A.P. program cannot be told in tangibles. It can be stated, however, that nearly every member of the MSMS did *at one time or another* contribute to the spreading of the program through horizontal channels.

4. *P. R. Field Secretaries:* The year 1949-50 saw the continued employment of two public relations field secretaries to carry on the detail work involved in the conduct of the C.A.P. program. Additionally one of the Lansing staff served as a part time field man in the central portion of the state.

The field secretaries:

a. Made personal calls on 1,592 doctors of medicine and/or lay persons.
b. Attended 352 meetings at which attendance averaged forty persons.
c. Made 319 speeches to medical and lay audiences.
d. Carried out administrative details in connection with the operation of the C.A.P. program in their respective areas.
e. Organized 104 meetings (averaged two weekly).
f. Traveled approximately 60,163 miles in the performance of their duties.
g. Spent the three months of the Michigan Legislatures Extra Session in residence at Lansing.
h. Attended six training sessions for field secretaries in Lansing.
i Assisted during the MSMS Annual Session in Grand Rapids and the 1950 Postgraduate Clinical Institute in Detroit.
j. Assisted with ideas and their development in the preparation of campaign plans and literature.

5. *Mail Contact:* Personal contacts were supplemented with contacts made through mailing of various letters, bulletins, etc. to the entire membership, selected groups and others.

a. Four C.A.P. Bulletins (total 20,000 copies) were prepared and mailed to all MSMS members.

b. Five legislative bulletins (5,105 copies) were mailed to key leaders.

6. *Preparation of Literature:* This Committee in cooperation with the Public Relations Committee planned the development of four new publications and placed orders for them in the amount of 195,000 copies. In addition reprints totalling 69,635 were ordered of existing MSMS educational publications. Campaign materials from the National Education Campaign of the AMA were ordered in the amount of over two million pieces and distributed to Michigan residents.

In addition to the above, several newly developed pamphlets and folders are in the process of production for use in the various phases of the "Good Citizenship Campaign." Several promotional pieces with a potential distribution of 25 million have been offered to various trade associations and political parties for extensive development by these groups. (See section on "Good Citizenship Campaign.")

7. *Distribution of Literature:* The second year of the C.A.P. has seen an increase in the number of requisitions for the various materials made available to lay groups by the MSMS.

To date 2,739 separate requisitions with an average of 250 pieces requested in each instance. This totals 684,750 copies of various pamphlets notwithstanding the mailing of approximately 3,000,000 items to the members of the MSMS.

8. *Preparation of Motion Pictures:* The second MSMS motion picture "To Your Health" was completed by the Jam Handy Organization of Detroit and has been shown in approximately 100 commercial theaters in Michigan to date.

The film deals exclusively with the subject of socialized medicine and has been previewed by thirteen state medical societies wth a view towards purchase while four states have already completed financial arrangements leading to state rights or prints of the film for use in their respective areas.

Individual letters and brochures were sent to every state medical society indicating its availability for use throughout the country.

9. *Speeches and Speakers Bureaus:* The significance of the spoken word as an effective medium for C.A.P. plan activity was brought out through the organization of speakers bureaus in many counties of Michigan.

An initial State Conference was held to stimulate interest and this was followed by seventeen District conferences at which plans for organization of county speakers groups were made.

The utilization of lay speakers as well as medical personnel on bureau rosters was emphasized. To aid this co-operative venture an attractive 108 page Speakers Manual was published and general distribution made.

Innate modesty on the part of many doctor-speakers has resulted in incomplete records as to the number of speeches made during the year. Available records coupled with conservative estimates place the total at well over 1,700 speeches.

The Committee arranged for a personal appearance tour in Michigan of Dr. Geoffrey Myers, English surgeon, in the United States for a visit.

10. *Special Projects:*

a. *The "Hourglass":* An idea which sparked in the mind of John E. Manning, M.D., a Saginaw surgeon was fanned into action by the MSMS with the result that today it is a subject of national importance. The idea was simple: just the use of a three-minute hourglass in the hands of a doctor to emphasize the length of time available for diagnosis and treatment under a socialized medicine plan with Britain as the example. The idea was a natural as shown by the following chronology:

(1) Introduced to 200 doctors in Detroit, January 22, 1950.
(2) Adapted by National Association of Medical-Dental Bureaus.
(3) Requests for information re idea from nearly every state of the union.
(4) Preparation of attractive display featuring idea for March Postgraduate Institute.
(5) Prominent newspaper coverage in Detroit newspapers.
(6) Letters and samples to every state medical society offering idea for use.
(7) Use by New Jersey State Medical Society at annual meeting coupled with displays on Atlantic City boardwalk.
(8) Feature story in *New York Times* on idea.
(9) Story in several trade magazines including *Hospital Topics*, *Medical Economics*, etc.
(10) Adaptation of idea to "Good Citizenship Campaign" re "It takes less than three minutes to vote."

b. *Resolutions:* The drive for resolutions against socialized medicine provided one of the year's projects. Originally the plan was for individual action by doctors and wives resulting in resolutions from single organizations. In February, however, the plan of action was changed to conform with a concerted nationwide effort being made by the National Education Campaign of the AMA.

A representative of the above organization in cooperation with an MSMS representative contacted the state offices of many civic, military and professional groups in Michigan.

Following these visits permission was obtained to canvass each of the component units of the state level organizations with a request for resolutions.

A direct result of this phase of the resolutions campaign was the mailing of 4,337 letters to the member units of the following organizations: AMVETS, AMVET Auxiliary, American Legion, American Legion Auxiliary, the State Bar of Michigan, Business and Professional Women's Clubs, Junior Chamber of Commerce, Daughters of the American Revolution, Farm Bureau, Federation of Women's Clubs and the Veterans of Foreign Wars Auxiliary.

The list of Michigan groups on record against socialized medicine grows with each day's mail, a direct reflection of the work of the MSMS members and their friends.

c. *Liaison with Ancilliary Groups:* The success of the horizontal approach of the C.A.P. plan has been due in a large measure to the following:

(1) *Michigan State Pharmaceutical Association:* The committee worked in constant association with the Executive Secretary and officers of this group. Realizing that the end purpose was mutual this group of 1,350 members gave splendid assistance through use of window displays and distribution of literature.

An excellent example of the spirit shown is that of the Bay County Drug Club whose twenty-six member stores each month distribute 1,000 MSMS pamphlets over their counters and wrapping desks.

The Association also donated ample space in their monthly bulletins to promote the use of "The Doctor" posters and other literature.

(2) *Michigan State Dental Society:* The dentists have been active in the promotion of free enterprise and distribution of literature prepared by the American Dental Association and others.

(3) *The Michigan Hospital Association:* This group through its Executive Director cooperated in many ways with the C.A.P. program. Bulletin boards in hospitals were devoted to an exposition of voluntary medicine and much literature was distributed through the Association's 187 member hospitals.

(4) *Michigan Grange and Michigan Farm Bureaus:* The stand of agriculture on the side of free enterprise was again reaffirmed this past year as the units of these two large organizations devoted meetings to discussions of the problem. They also served as distribution centers for materials.

(5) *Insurance Underwriters:* These groups took official action and invited members of the medical profession to address scores of meetings. As a result of these appearances many of the groups are on record with resolutions against socialism.

(6) *Pharmaceutical Manufacturers and Suppliers:* A meeting was held for the Michigan contact men for all large manufacturers in late May at which their active cooperation was pledged by leading officials of the group.

Indicative of the attitude assumed are the daily requests for materials from the stores and outlets represented among the customer lists of the contact men.

(7) In addition to those groups mentioned above there have been many instances when the Committee has cooperated with interested organizations, large and small, in the dissemination of information and materials to the "grass roots" level.

11. *The Woman's Auxiliary to the Michigan State Medical Society:* This group which reached its greatest total of memberships since its birth proved to be one of the most potent and able allies in the entire program.

Under the direction of the State Officers the Auxiliary maintained a close knit C.A.P. organization assuring that every project assigned the women was completed with excellent results.

The women were unusually active in the resolution campaign with more than half of the resolutions secured coming from their efforts.

The Auxiliary published three Bulletins for their membership in which all new phases of existing and new programs were detailed.

The Auxiliary also acquitted themselves with honors as a pamphlet distribution system.

12. *"The Good Citizenship Campaign":* This plan was developed and implemented as the focal point of the C.A.P. effort from May 7 to November 7. Due to the extent and complexity of the program no attempt is made here to either sketch the plan which was outlined in the Good Citizenship Campaign brochure nor to detail the meetings and activities incident to its development. It should be said, however, that every energy of the society has been directed toward the end of making this campaign bring about an increased vote of Michigan people in the September and November elections of 1950.

Respectfully submitted,

L. W. Hull, M.D., *Chairman*
O. O. Beck, M.D.
L. F. Foster, M.D.
E. A. Osius, M.D.
C. E. Umphrey, M.D.

ANNUAL REPORT OF THE COMMITTEE ON POSTGRADUATE MEDICAL EDUCATION, 1949-50

The Committee on Postgraduate Medical Education reports that the extramural teaching program was held in the following centers in the year 1949-50: Adrian, Alpena, Battle Creek, Bay City, Cadillac, Flint, Jackson, Lansing, Midland, Mt. Clemens, Muskegon, Niles and Traverse City in the lower peninsula; and at Escanaba, Houghton, Iron Mountain, Ironwood, Marquette, Menominee and Sault Ste. Marie in the upper peninsula.

The subjects given were:

Fall Program

The Arthritides. Medical and Surgical Management. (Panel Discussion)
Massive Hemorrhage from the Upper Gastrointestinal Tract.
The Heart in Pregnancy.
Diagnosis of Early Pelvic Malignancy.
Peptic Ulcer, Medical and Surgical Management. (Panel Discussion).
Anticoagulant Therapy.
Modern Treatment of Burns.
The Hemorrhages of Pregnancy.
Bleeding Ulcerative Lesions of the Intestinal Tract.
The Adrenals.
Carcinoma of the Stomach.
Proper Psychiatric Approach to Mental Disorders in the Aged.
Some Aspects of Everyday Psychiatric Therapy.
Tumors of the Face and Neck.
Some Aspects of Coronary Disease.
Prematurity and Neonatal Deaths.
Examination of the Heart.
Renal Function in the Postoperative Surgical Patient and the Management of Acute Renal Failure.

Spring Program

Borderline Gastrointestinal Lesions. The Medical and Surgical Aspects.
Diseases Produced and Transmitted by Blood Transfusions—and their Prevention.
Splenectomy and Blood Disorders.
Practical Approach to Functional Diseases.
Diseases of the Breast.
The Premature Infant.
Bleeding from the Gastrointestional Tract.
Adrenals.
Common Dermatological Diseases.
Arthritis.
Clinical Management of Infertility in the Male.
Common Pediatric Problems.
Anticoagulants.
Chronic Pulmonary Disease.
Medical Concept of Vascular Surgery.
Paroxysmal Tachycardia.

Attendance 1949-1950

Extramural Program	*Fall*	*Spring*	*Individual Physicians*
Adrian	23	17	27
Alpena	22	15	24
Battle Creek	64	—	64
Bay City	27	36	47
Cadillac	—	33	33
Flint	69	52	96
Jackson	78	95	118
Lansing	69	48	94
Midland	30	34	45
Mt. Clemens	39	35	48
Muskegon	36	53	72
Niles	—	39	39
Traverse City	37	—	37
Upper Peninsula:			
Escanaba	15	14	18
Houghton	15	19	21
Iron Mountain	14	18	23
Ironwood	24	22	30
Marquette	23	26	35
Menominee	20	28	30
Sault Ste. Marie	15	22	23
	620	606	924

In addition to the regular fall and spring extramural programs offered in the established teaching centers, the following attendance on special postgraduate meetings was reported to the Department of Postgraduate Medicine:

Coller-Penberthy Clinic—July 28-29, 1949—Traverse City—112
Michigan State Medical Society—Sept. 20, 21, 22, 23, 1949—Grand Rapids—1587
Michigan Postgraduate Clinical Institute—March 8, 9, 10, 1950—Detroit—1402
Cancer Day—April 12, 1950—Flint—194
West Side Medical Society Clinic—April 12, 1950—Eloise—70
Ingham County Medical Society meeting—May 4, 1950—Lansing—209

The following named physicians participated in the extramural postgraduate teaching program during the year:

Paul S. Barker, M.D.
Gaylord S. Bates, M.D.
Robert E. L. Berry, M.D.
Frank H. Bethell, M.D.
James B. Blodgett, M.D.
John R. Brown, M.D.
Robert W. Buxton, M.D.
Edward P. Cawley, M.D.
Jerome W. Conn, M.D.
Don R. Cooper, M.D.
Milton A. Darling, M.D.
Marion S. DeWeese, M.D.
John M. Dorsey, .D.
Ivan F. Duff, M.D.
Lawrence S. Fallis, M.D.
F. Bruce Fralick, M.D.

A. C. Furstenberg, M.D.
Reynold L. Haas, M.D.
Frank W. Hartman, M.D.
Samuel D. Jacobson, M.D.
Franklin D. Johnston, M.D.
Ben Johnstone, M.D.
James S. Krieger, M.D.
Harold J. Kullman, M.D.
Edward E. Levine, M.D.
James J. Lightbody, M.D.
Solomon G. Meyers, M.D.
Norman F. Miller, M.D.
Dan W. Myers, M.D.
Harry M. Nelson, M.D.
Reed M. Nesbit, .D.
Rudolf J. Noer, M.D.
Eugene A. Osius, M.D.
A. Hazen Price, M.D.
Henry K. Ransom, M.D.
William D. Robinson, M.D.
Arthur E. Schiller, M.D.
John M. Sheldon, M.D.
Donald C. Somers, M.D.
Robert Sterling, M.D.
Myer Teitelbaum, M.D.
Harry A. Towsley, M.D.
Raymond W. Waggoner, M.D.
Ernest H. Watson, M.D.
Charles N. Weller, M.D.
James L. Wilson, M.D.

During the year 1949, fifty-two physicians were recommended to the Michigan Foundation for Medical and Health Education for Fellowship certificates and seventy-two physicians for Associate Fellowship certificates in Postgraduate Medical Education.

Intramural Activities

The postgraduate courses listed below were given at the University of Michigan Medical School in 1949-50, with the following attendance.

Allergy	20
Anatomy	64
Cancer	21
Clinical Exercises for Practitioners	39
Clinical Internal Medicine	77
Clinical Neurology	18
Decentralized Resident Training Program	32
Diagnostic Roentgenology	41
Diseases of Blood and Blood-Forming Organs	30
Diseases of Gastrointestinal Tract	14
Diseases of the Heart	19
Electrocardiographic Diagnosis	153
Foreign Physicians	12
Metabolism and Endocrinology	31
Miscellaneous	8
Neuropsychiatry	5
Ophthalmology	144
Pathology	12
Pediatrics	42
Recent Advances in Therapeutics	32
Residents and Assistant Residents	142
Rheumatic Disease	14
	970

The Committee on Postgraduate Medical Education held two meetings during 1949-50. The first meeting was on January 12, and the second on May 11, 1950. The minutes of both meetings were submitted to the Executive Committee of the Council and approved.

No radical changes have been made in the teaching program since last year. The policy of establishing teaching centers in smaller and less populous areas has been continued. No center has been established until the Committee felt that there was an interest among the physicians of that area and an oral or written request had been made.

Interest in the Upper Peninsula has been maintained at a high level and the physicians of this part of the State through their Councilors are experimenting with teaching centers in new areas.

The important objectives of the program are, namely, the establishment of the habit of attending medical refresher courses and the encouragement of centers to improve their local educational facilities; the initiation of new teaching centers, and promulgation of postgraduate activities in centers where the program has been in operation for many years. These objectives are being carried out.

Although our records of attendance are far from complete, we have knowledge that over half of the physicians in Michigan are attempting to improve their medical knowledge by postgraduate activities. It is the feeling of the Committee that many other physicians are following a similar plan but are not reporting their attendance to the Committee on Postgraduate Medical Education. This seems to be especially true among the physicians in the specialties.

The picture as a whole is optimistic. The Committee members are greatly interested in the work of postgraduate medical education. The officers and Council of the State Society are most cooperative. Relations with the Michigan Department of Health are helpful and friendly. Several committees of the Michigan State Medical Society are using the facilities of the postgraduate medical education program to conduct educational activities in their fields.

The swing away from didactic lectures to clinical programs in hospitals is characteristic of the changes constantly taking place in any educational program. The plans must be flexible to meet the changing conditions of different times and places.

The members of the Committee appreciate the happy cooperation received from all the integrated agencies. They especially welcome constructive criticism of the program and helpful suggestions for its improvement.

Respectfully submitted,
H. H. Cummings, M.D., *Chairman*
E. I. Carr, M.D., *Vice Chairman*
B. R. Corbus, M.D.
G. J. Curry, M.D.
A. C. Furstenberg, M.D.
L. J. Gariepy, M.D.
John Heidenreich, M.D.
A. C. LaBine, M.D.
P. A. Riley, M.D.
J. M. Robb, M.D.
J. M. Sheldon, M.D.
W. J. Smith, M.D.
E. D. Spalding, M.D.
F. A. Weiser, M.D.
G. H. Scott, Ph.D.

SUPPLEMENTAL REPORT

Wayne University College of Medicine

During the current academic year there were 344 registrations in the postgraduate program of medical education in the College of Medicine of Wayne University. These registrations were in the following departments and courses, with pathology and internal medicine having the highest number of registrants.

Pathology	
Surgical Pathology	28
Gynecologic Pathology	37
Beginning Hematology	6
Neuropathology	11
Path. of Neoplasms	15
Histopathology of Ear, Nose and Throat	7
	104
Anatomy	
Surgical Anatomy	22
Histology	1
Regional Anatomy	
Trunk	27
Back & Extremities	7
Head and Neck	7
	64
Physiology and Pharmacology	
Survey of Pharmacology	14
Blood	4
	18
Physiological Chemistry	
Seminar	3
Biological Catalysts	1
Nutrition	2
Intermediary Metabolism	3
	9
Basic Ophthalmology	8
Psychiatry	
Psychosomatic Conference	1
Dermatology	
Seminar	12
Seminar in Dermopathology	1
Conference on Venereal Diseases	1
	14

Medicine	
Seminar	19
Medical Conference	24
Gastroenterology	7
Medical X-Ray Conf.	5
EKG	54
Allergy Clinic	2
	111
Surgery	
Seminar	15

ANNUAL REPORT OF THE VENEREAL DISEASE CONTROL COMMITTEE, 1949-1950

Two regular meetings of the Venereal Disease Control Committee were held during the past year—on January 8, 1950 and May 14, 1950 in Lansing. An additional meeting is planned for July 15 in Muskegon. Attendance of the twelve-member Committee has been excellent, only one member being absent from the January and two members from the May meeting.

At the January meeting possible means of improving the serodiagnosis of syphilis including spinal fluid and verification tests were discussed. The Committee recommended that the Kahn verification should not be considered as proving or disproving the presence or absence of syphilis. Dr. Curtis reported on Turner's immobilization test and of their plans for eventually doing the test at Ann Arbor. The need for cell counts and total protein determinations on spinal fluids as a guide to the activity of neurosyphilis was emphasized and it was suggested that this need should be invited to the attention of doctors of medicine through the monthly news releases.

Treatment requirements for special marriage dispensation were discussed. It was advised that present requirements should be continued, namely: one year of follow-up after completion of adequate treatment for cases of early syphilis, with recommendation for leniency in selected cases; cases of late syphilis to be considered eligible as soon as treatment is controlled.

Reports of the special committee working with the Ingham County Medical Society on better source and contact-finding, the nation-wide program for multiple screening examinations, and a program for reduction of congenital syphilis were heard with interest but no action taken.

At the May meeting, the program of the Veterans Administration for re-evaluation of veterans diagnosed and/or treated for syphilis during the recent war with special reference to neurosyphilis were presented. It was decided that this subject was beyond the purview of the Committee.

Mr. Crossley, Director of the Venereal Disease Education of the Michigan Department of Health reported in detail on his program. The committee recommended that copies of the magazine "My Story" and other literature be made available in physicians' offices.

Dr. Shaffer reported on the outstanding papers of the symposium on venereal disease held in Washington, D. C., on April 27 and 28. These included papers on Nelson's immobilization test for syphilis, and reports on further follow up of penicillin-treated neurosyphilis and the use of aureomycin and chloramphenicol in the treatment of venereal disease.

The future use and need of the Rapid Treatment Center at Ann Arbor was the subject of prolonged discussion. It was moved and carried that the Committee feels the widespread use of the Michigan Rapid Treatment Center is no longer necessary and recommends that the accommodations and expenses be reduced proportionately to the need.

Finally, the need for making diagnostic facilities available for V. D. in rural areas was discussed. It was moved and carried that the problem of any rural community be subject to such arrangements as the local health department and the county or district medical society approves, and that advice and assistance will be given by this committee at any time upon request.

Respectfully submitted,
L. W. Shaffer, M.D., *Chairman*
R. S. Breakey, M.D.
J. A. Cowan, M.D.
R. C. Crowell, M.D.
A. C. Curtis, M.D.
E. A. Hand, M.D.
Ruth Herrick, M.D.
R. H. Holmes, M.D.
H. L. Keim, M.D.
E. S. Parmenter, M.D.
Frank Stiles, M.D.
D. E. Siler, M.D.
O. D. Stryker, M.D.

ANNUAL REPORT OF PREVENTIVE MEDICINE COMMITTEE, 1949-1950

During the past year the Preventive Medicine Committee, fulfilling its prescribed role, has served as guide and coordinator for its numerous advisory groups with their extensive activities. Since the detailed reports prepared by these committees are published contemporaneously, only a few of their high points will be listed here.

1. The Scientific Radio Committee is making every effort to extend its coverage and has been seeking out the smaller stations throughout the State through which to release its excellent recordings.

2. The Committee on Postgraduate Medical Education is establishing new teaching centers in sparsely settled areas and is utilizing programs consisting either of panel discussions, clinics at local hospitals or individual speakers. It is considering the incorporation into its teaching program of the activities of several State Society Committees dealing with such special problems as cancer control, industrial health and geriatrics.

3. The Rheumatic Fever Control Committee is gradually perfecting its organization of centers and is making steady progress in stimulating research, clinical and educational effort.

4. The Maternal Health Committee is engaged in a statewide survey of maternal mortality and a parallel program of education.

5. The V. D. Control Committee is continuing its efforts towards earlier and better diagnosis of venereal disease, improved contact finding, and solving the problems that arise in connection with marriage license applications.

6. The Industrial Health Committee staged a "Michigan Industrial Health Day" on March 29, 1950 in Ann Arbor that was easily one of the outstanding events of the year. The committee is considering the establishment of extramural postgraduate courses, arranging in-plant meetings with county medical societies and urging appointment of industrial health committees by county societies.

7. The Child Welfare Committee is embarking on a sight and hearing conservation project in addition to its development and formulation of immunization procedures.

8. The Geriatrics Committee is concerned with the problem of improving and expanding facilities for care of the aged. Its subcommittee on diabetes again achieved distinction for its outstanding Diabetes Detection program and is doing a yeoman job in putting detection of this disease on a year-'round basis.

9. The Iodized Salt Committee is planning a resurvey of schools in certain Michigan areas to determine the present incidence of enlarged thyroids as compared with the findings of several years ago. The amount of iodized salt used in these communities will also be determined.

The above constitutes but sketchy evidence of the vast amount of thought, time and effort expended in furthering the interest of public health.

In all of its deliberations the Preventive Medicine Committee has had most helpful co-operation from Michigan Health Commissioner Albert E. Heustis, M.D., and the State Health Department, for which it is deeply appreciative.

Respectfully submitted,

W. S. Reveno, M.D., *Chairman*
M. R. Burnell, M.D.
W. B. Cooksey, M.D.
G. D. Cummings, M.D.
H. H. Cummings, M.D.
J. M. Dorsey, M.D.
Cameron Haight, M.D.
A. E. Heustis, M.D.
R. B. Kennedy, M.D.
R. D. McClure, M.D.
N. F. Miller, M.D.
L. W. Shaffer, M.D.
J. M. Sheldon, M.D.
L. P. Sonda, M.D.
Frank Van Schoick, M.D.

ANNUAL REPORT OF MATERNAL HEALTH COMMITTEE, 1949-1950

Meetings were held November 2, 1949 and December 6, 1949, with a subcommittee meeting on March 7, 1950.

The Committee, during the year, has been concerned with the following items:

1. How to improve the standards of hospitals caring for obstetrical patients. It was pointed out that the Michigan Department of Health has laid down standards which each hospital engaging in obstetrics should conform to, but, since licensing of hospitals is under the State Welfare Department it is impossible for such standards to be assured. The Health Department does not have the necessary power to force hospitals to conform to proper standards in obstetrics. It was the opinion of this Committee that licensing of hospitals should be under the Michigan State Health Department rather than the Welfare Department.

2. The survey of maternal deaths in Michigan developed a form suitable for use in surveying the maternal deaths throughout the State.

At a later meeting a form was agreed upon, the State was divided into six districts and investigators were appointed for each district. Two investigators were appointed in several districts. Each investigator is a member of the American Board of Obstetrics and Gynecology or eligible. It was agreed the investigator be paid $25.00 and mileage for each maternal death investigated. At present the work is proceeding very satisfactorily. It is hoped this work will further reduce maternal deaths in Michigan.

3. Preventable Maternal Deaths.

It was recommended in the larger centers, that the county medical society's Maternal Health Committee hold monthly meetings to discuss preventable maternal deaths with interns and residents of the various hospitals in the community, also general practitioners, and whereever possible with the attending physician.

4. Dr. Goldie Corneliuson, of the Michigan Department of Health, brought up the problem that the Uniform Fee Schedule for Governmental Agencies, recommended by the Michigan State Medical Society, does not include prenatal care. Neither does Michigan Medical Service include fee for prenatal care. This is believed to be conducive to neglect in the prenatal period. The Maternal Health Committee believes some constructive efforts should be made to correct this defect.

5. The Committee approved the use of maternal and child health funds administered by the Michigan Department of Health for the hospitalization at the University of Michigan Maternity Hospital of a limited number of maternity patients with complications, on recommendation of the attending physician. This would provide improved care and afford teaching material. Patients eligible shall be medically indigent or financially unable to afford such care.

Respectfully submitted,

R. B. Kennedy, M.D., *Chairman*
W. H. Boughner, M.D.
A. M. Campbell, M.D.
A. L. Foley, M.D.
J. L. Gillard, M.D.
S. T. Lowe, M.D.
C. W. Newton, M.D.
H. A. Pearse, M.D.
J. R. Rodger, M.D.
J. N. Scher, M.D.
L. C. Spademan, M.D.
P. E. Sutton, M.D.
D. W. Thorup, M.D.
C. E. Toshach, M.D.
P. W. Willits, M.D.

ANNUAL REPORT OF JOINT COMMITTEE ON STUDY OF MEDICAL PRACTICE ACT, 1949-1950

A Committee for the Study of the Medical Practice Act of the State of Michigan was formed in the summer of 1949. This committee is comprised of six members, three representatives of the Michigan State Medical Society and three from the Michigan State Board of Registration in Medicine. The function of the committee is to study the present Medical Practice Act and to recommend changes to bring it up-to-date. Due to illness and subsequent death of one of the members of the committee representing the Michigan State Medical Society, and due to the replacement on the State Board of Registration of one of its members, this Committee was not able to function until March, 1950. The first meeting was held in Detroit, on March 8; the second meeting was held in Lansing on April, 26; the third meeting was held in Grand Rapids on May 25. A fourth meeting is scheduled for Sunday, June 18, in Lansing.

It is hoped to completely review the Act by that time and to have all necessary changes made. After the committee has finished its work, its recommendations will be submitted to the Michigan State Medical Society and to the Michigan State Board of Registration in Medicine. If the changes are approved by these bodies, the proposed new legislation will be submitted to the Legislature at its regular session in 1951.

Respectfully submitted,

F. L. Troost, M.D., *Chairman*
Cecil Corley, M.D.
L. A. Drolett, M.D.
W. B. Harm, M.D.
Mr. J. Joseph Herbert
J. E. McIntyre, M.D.
J. D. Miller, M.D.
E. W. Schnoor, M.D.
E. F. Sladek, M.D.
R. A. Sokolov, M.D.

ANNUAL REPORT OF THE ADVISORY COMMITTEE TO THE BUREAU OF MATERNAL AND CHILD WELFARE, 1949-1950

The Advisory Committee to the Bureau of Maternal and Child Welfare has had no formal meetings. The chairman had repeated telephone conferences and two personal conferences with the director of the Bureau. The problems involved were those of ordinarily accepted medical policies of the Michigan State Medical Society and no committee meeting was required. The committee

has been circularized with two publications of the Bureau, namely, "Recommendations for Hospital Nurseries" and "Recommendations for Hospital Maternity Departments." Suggestions and corrections in the original draft of these publications have been incorporated in the present editions which have been published.

The relations between the Michigan State Medical Society and the Bureau continue to be very co-operative.

Respectfully submitted,
FRANK VAN SCHOICK, M.D., *Chairman*
C. F. BRUNK, M.D.
A. M. CAMPBELL, M.D.
H. A. FURLONG, M.D.
W. G. HOEBEKE, M.D.
R. M. KEMPTON, M.D.
R. B. KENNEDY, M.D.
W. R. KLUNZINGER, M.D.
S. L. LOUPEE, M.D.
L. P. SONDA, M.D.

ANNUAL REPORT OF ADVISORY COMMITTEE TO DEPARTMENT OF PUBLIC INSTRUCTION TO RE-EVALUATE THE CURRICULA OF SCHOOLS FOR TRAINING OF MEDICAL AIDES, 1949-1950.

This committee had one meeting March 15, 1950, in Lansing for the purpose of re-evaluating the curricula of schools for training of Medical Aides.

The current standards of the AMA Council on Medical Education for the training of medical technologists were reviewed and reaffirmed in general, the main point being interpretation of the rules. The standard for licensing of training schools for medical assistants and medical aides was reviewed and revised in several items.

It was also recommended that the Superintendent of Public Instruction encourage Junior Colleges and other recognized and accredited educational institutions to establish and publicize offerings designed to provide training for medical office aides, medical office assistants and medical office secretaries, and that one school be selected to develop a demonstration program in this field.

The current program of specific institutions was studied and it was the general consensus of opinion that training approval be withheld until these institutions meet the standards of the American Medical Association Council on Medical Education.

Lists of professional references to be used by interns and residents in GI-approved training program in hospitals were submitted. It seemed as if some schools were demanding unusually large numbers of texts. These were the list of texts which the Veterans Administration has been asked to purchase for the resident's own use and addition to his personal library.

It was suggested that the State Department of Public Instruction or the Veterans Administration check these lists with the various specialty boards.

Respectfully submitted,
WILFRID HAUGHEY, M.D., *Chairman*
L. FERNALD FOSTER, M.D.
W. B. HARM, M.D.
J. A. KASPER, M.D.
L. A. PRATT, M.D.

ANNUAL REPORT OF COMMITTEE ON INCREASE OF MEDICAL STUDENTS GRADUATED FROM MICHIGAN MEDICAL SCHOOLS, 1949-50

By planning greater use of facilities available at the University of Michigan Medical School, the incoming class of students will number about 200, a definite increase over the previous class of 150.

The State of Michigan has made a grant to the Wayne University College of Medicine to develop plans and working drawings for a new Science Building, which if and when completed will enable an increase from 64 to 100 students per class.

Your committee feels that it had a primary part in stimulating interest and plans to increase the number of medical graduates from our two medical schools in the State of Michigan.

Respectfully submitted,
E. F. SLADEK, M.D., *Chairman*
J. S. DETAR, M.D.
L. FERNALD FOSTER, M.D.

ANNUAL REPORT OF THE ADVISORY COMMITTEE ON RURAL HEALTH SURVEY, 1949-50

The Advisory Committee on Rural Health Survey met at Grand Rapids, October 28, 1949. Copies of the Health Survey, as prepared by C. R. Hoffer and his staff of the Michigan State College, were given to the members of the committee. The conclusions that were drawn by Professor Hoffer's staff were discussed and in some instances were changed. Because of the length of the report, it was suggested that each member take a copy home with him and make his own notations regarding conclusions arrived at and that they then be forwarded to our Public Relations Council H. W. Brenneman and before any release be made by the college, the conclusions drawn should be edited by either Mr. Brenneman or this entire committee.

Respectfully submitted,
H. B. ZEMMER, M.D., *Chairman*
J. S. DETAR, M.D.
R. J. HUBBELL, M.D.
W. H. MAST, M.D.
J. R. RODGER, M.D.

ANNUAL REPORT OF COMMITTEE ON COURSES IN MEDICAL ECONOMICS, 1949-50

Twelve lectures were delivered by members of the Michigan State Medical Society to the senior student classes of the Wayne University College of Medicine and the University of Michigan Medical School. The subjects covered were: Rural Medical Practice; Prepayment Medical Care Plans; Governmental Agencies in the Field of Medical Care; Organized Medicine; Socialized Medicine; Office Management and Records.

The student body and both Deans were appreciative of our interest and efforts in this type of extramural teaching program.

Respectfully submitted,
E. F. SLADEK, M.D., *Chairman*
J. S. DETAR, M.D.
L. FERNALD FOSTER, M.D.
E. A. OAIUS, M.D.
J. R. RODGER, M.D.

ANNUAL REPORT OF THE SPECIAL COMMITTEE ON MENTAL AND SOCIAL PROBLEMS, 1949-50

The Committee on Mental and Social Problems was created because of a desire on the part of the Michigan State Medical Society to clarify the medical care and laws pertaining to the sex deviate. We believe our suggestions have been most constructive. In our opinion the so-called Goodrich Law is inadequate. It should be made temporarily workable in this short session of the

(Continued on Page 984)

"**AMINOPHYLLIN** shares the actions and uses of other theophylline compounds, over which it has the advantage of greater solubility. It is useful as a diuretic and myocardial stimulant for the relief of pulmonary edema or paroxysmal dyspnea of congestive heart failure. . . . Aminophyllin is also useful in the control of Cheyne-Stokes respiration and for the treatment of paroxysms of bronchial asthma or status asthmaticus."

Council on Pharmacy and Chemistry: New and Non-official Remedies, 1949, Xanthine Derivatives, Philadelphia, J. B. Lippincott Company, 1949, p. 323.

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RESEARCH IN THE SERVICE OF MEDICINE

ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

*Contains at least 80% of anhydrous theophylline.

(Continued from Page 982)

Legislature and then eventually replaced if it still fails to offer rapid and complete direction and care.

In our opinion this is a problem which will require long and continued study. We believe the psychiatric clinics should have more funds and trained personnel so that the sex deviate can be treated as an emergency case.

We believe sex education should be properly directed to the medical profession, schools, mothers, and those who contact and train children. Eighty-five per cent of the youthful deviates can be properly controlled.

Complete co-operation has been enjoyed with the Court, State Bar of Michigan, and the Governor's Commission. The tempo of the work so well begun should be speeded up until this entire problem is satisfactorily settled. The press has been most co-operative but we are sure will become critical again if the endeavors begin to lag.

The chairman wishes to thank the committee members for their splendid co-operation. They are rendering a much-needed service to the people of Michigan.

Respectfully submitted,
C. E. Umphrey, M.D., *Chairman*
William Bromme, M.D.
J. M. Dorsey, M.D.
L. A. Drolett, M.D.
T. J. Heldt, M.D.
T. J. Kane, M.D.
R. W. Waggoner, M.D.
H. B. Zemmer, M.D.
H. W. Brenneman, *Advisor*

ANNUAL REPORT OF THE SPECIAL COMMITTEE TO STUDY IMMUNIZATION CAMPAIGN, 1949-50

The continuing high degree of immunization of children being carried on by physicians throughout the state has relieved the Committee to Study Immunization Campaign of the necessity of considering any special programs at this time.

Respectfully submitted,
E. E. Martmer, M.D., *Chairman*
C. C. Benjamin, M.D.
L. V. Burkett, M.D.
F. H. Drummond, M.D.
A. E. Heustis, M.D.
H. F. Vaughan, Ph.D.
H. B. Zemmer, M.D.

ANNUAL REPORT OF COMMITTEE TO STUDY HEALTH PLANS, 1949-50

The Committee to Study Health Plans originally headed by the late P. L. Ledwidge, M.D., was created primarily to study possible extension of Michigan Medical Service contracts, including the provision of service to those in income limits of $5,000, and less

The committee met on September 12, 1949, and on March 19, 1950.

At its first meeting, the committee developed a statement on increased income limits under Michigan Medical Service which was presented to The Council of the Michigan State Medical Society on September 18. The Council adopted the concept of the Committee, as follows:

"(a) Increase the income limits of Michigan Medical Service to $5,000.

"(b) Increase the schedule of fees paid physicians.

"(c) Provide that all hospital services of physicians, both medical and surgical, be included as benefits.

"(d) Continue all the present forms of contracts affecting the $2,500 income limits."

The following day, September 19, The Council's recommendations were presented to the MSMS House of Delegates, and subsequently adopted.

At its second meeting, the committee reviewed the survey of fees for physicians and surgeons serving the subscribers of Michigan Medical Service in the $5,000 income-and-under group and reported its findings to the MSMS Council.

Respectfully submitted,
A. S. Brunk, M.D., *Chairman*
L. Fernald Foster, M.D.
R. J. Hubbell, M.D.
O. O. Beck, M.D., *Ex Officio*

ANNUAL REPORT OF THE COMMITTEE ON RHEUMATIC FEVER CONTROL, 1949-50

The Committee on Rheumatic Fever Control has had four meetings and contemplates one more before the annual meeting this fall. These meetings have been held in various regions with the local Rheumatic Fever Center chairman invited to participate and present his individual problems. One meeting in Battle Creek attempted to clarify the aims of the State Committee and do away with certain misconceptions held by the local group. These regional meetings have been quite satisfactory in settling minor local problems and re-stimulating the Center personnel to greater activity. They have served too as a news item of value to a local community.

The activities of the Rheumatic Fever Control program are of a continuing nature in (1) Education to lay and professional groups, (2) Services to the patient, (3) Publicity, (4) Financial.

Education.—The committee has continued to publish abstracts of current literature which were distributed to the personnel of each Center and also are available to the physicians who request them. The committee cooperated with the Michigan Heart Association in the program of the first annual Heart Day of March 11 which followed the Michigan Postgraduate Clinical Institute in Detroit. The committee has revised and re-published the pamphlet for physicians on early diagnosis of Rheumatic Fever and a pamphlet for lay consumption entitled "A Primer for Parents" on rheumatic fever. The latter piece of literature was printed by the Michigan Department of Health. Members of the committee and particularly members of the local Centers have presented lay talks to various groups throughout the State. The local Center chairmen have been very active in putting on local County Medical Society programs on Rheumatic Fever. In this the state co-ordinator, Leon DeVel, M.D., has been most willing to co-operate. A field worker has been employed and used extensively in the Grand Rapids area.

Under Services to the Patient, we invite attention to the summary of the co-ordinator's activity which is appended.*

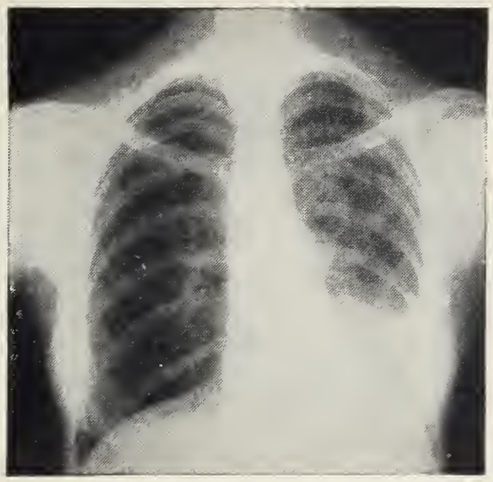
Publicity.—The committee's activities have been publicized at all levels and with the aid of the MSMS Public Relations Counsel have been widely distributed throughout the State and the United States. The committee's activities have been of inestimable value in public relations of the Medical Society at all levels. This is an intangible value, yet those of us who have been close to the program fully appreciate its presence.

Financial.—The committee co-operated with the Michigan Heart Association's financial drive which was most successful. The major portion of the cost of the program is now being underwritten by the Michigan Heart Association which this committee helped organize last year.

The Society for Crippled Children and Adults, Inc. continues to give very valuable financial aid and the

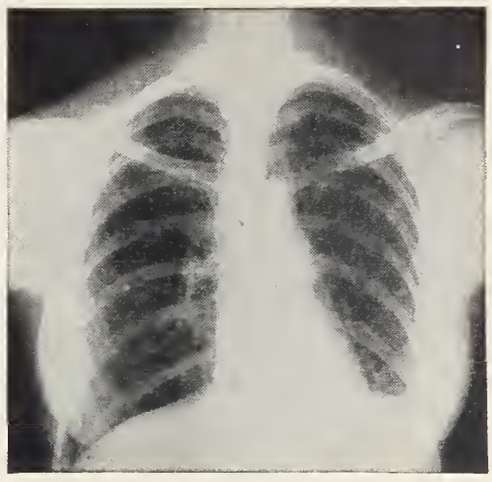
(Continued on Page 1000)

*Co-ordinators report not received to July 12, 1950.



Before Treatment (*9 days prior to Dihydrostreptomycin therapy*) *Diffuse lobular tuberculous pneumonia, lower half of left lung; thin-walled cavity above hilus (3 x 3.5 cm.).*

After 3 Mos. Treatment (*2 days after discontinuance of Dihydrostreptomycin*) *Considerable clearing of acute exudative process in the diseased lung; cavity smaller and wall thinner.*



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Dihydrostreptomycin and Streptomycin are unquestionably the most potent antibiotics now available for use against tuberculosis. Extensive clinical results have defined the important role of these antibiotics in suppressing the activity of the tubercle bacillus.

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Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

Effective July 1, 1950, the Laboratories of the Michigan Department of Health ceased performing blood grouping and Rh determinations. Discontinuance was necessitated by budget cuts.

* * *

Hay-fever sufferers may find haven this summer in about half of Michigan's area—the northern third of the lower peninsula and almost all of the upper peninsula. Six Michigan communities were virtually free of ragweed pollen last summer and seventeen others reported no more than six days with pollen counts of over 100.

Areas which reported no significant pollen counts at any time during the season were: Boyne City, Charlevoix, East Tawas, Petoskey, St. Ignace and Sault Ste. Marie. Munising reported only one day with significant pollen count; Crystal Falls, Marquette, Newberry and Ontonagon, only three days; Escanaba, Gladwin and Houghton only four days; Mackinac Island, only five days and Eagle Harbor and Manistique, only six days.

Cities having longest hay fever seasons were Battle Creek, Grand Rapids, Hillsdale and Saginaw, each of which had thirty-three days with pollen counts over 100 and Lansing and Jackson which had thirty-two and thirty-one days, respectively.

Reprints of the report of the 1949 and previous years' surveys may be obtained free of charge from the Michigan Department of Health. There will be no 1950 pollen survey because of cuts in the Department budget.

* * *

The attention of members of the Michigan State Medical Society is respectfully called to a report of the Sub-committee on Clinical Classification of the Committee on Revision of Diagnostic Standards in the May, 1950, American Review of Tuberculosis. The definition of minimal, moderately advanced, and far advanced pulmonary tuberculosis is given. The terms "apparently cured," "apparently arrested" and "quiescent" now become obsolete. The new classifications of roentgenologic, symptomatic and laboratory status are "inactive," "arrested," "active" and "activity undetermined." These terms are defined in this report.

The three state tuberculosis sanatoria began use of the new classifications July 1, 1950. Other sanatoria have been circularized by this Department and all are expected to adopt the new terminology.

It is hoped that Michigan physicians will acquaint themselves with this new terminology and that it will be adopted on a uniform basis throughout the state.

* * *

The Michigan Department of Health has obtained a new small film trailer type mobile x-ray unit to replace one of the five x-ray units now in operation. The new equipment replaces the unit originally put in service at the beginning of the department's tuberculosis case-finding program in 1940.

The equipment may be operated either in the trailer or in a building, as conditions warrant, and is expected to be placed in service this month.

* * *

Beginning immediately, the Michigan Department of Health is making available to physicians procaine penicillin in oil for the treatment of syphilis. The penicillin will be distributed through the local full-time health department where such exists and directly by the Michigan Department of Health where there is no local department.

Except in unusual circumstances, not more than 6,000,000 units of penicillin will be furnished for any one case. Health departments will furnish the penicillin to practicing physicians upon receipt of a morbidity report, after check to insure that penicillin was not previously furnished for the patient.

* * *

The USPHS has issued recommendation that fluoridation of municipal water supplies for prevention of dental caries be "encouraged" because "evidence which tends to substantiate the usefulness of the procedure is rapidly accumulating." The recommendation is based in part on recently analyzed data from the Grand Rapids fluoridation project.

State and Territorial Dental Health Directors meeting in Washington June 7, 8 and 9 unanimously recommended the fluoridation of public water supplies for partial control of dental caries "where the local and medical profession have approved the program and where the community can meet and maintain standards required by the state health authority."

* * *

The Division of Engineering has received reports of swimmers' itch from some southern Michigan counties.

The Water Resources Commission has two crews working on a curtailed swimmers' itch control program in the northern part of the state. These crews examine beaches to determine if the snail host is present. Where snails are found, the beach owners or municipality buys the chemical for treatment of the beach. The Water Resources Commission crews spreads the chemical on the beach.

Reports of swimmers' itch or requests for treatment of beaches should be referred to Lloyd Gouine, Supervisor, Swimmers' Itch Control Program, P.O. Box 375, Boyne City, Michigan.

* * *

Dr. V. W. Volk, Director of the Saginaw County Health Department, is on temporary assignment as a public health consultant in the American Zone of Occupied Germany. Dr. Volk left July 14 to spend three months in Europe.

(Continued on Page 994)

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The Barlow-Maney enteric coating* is a special formula. It protects the medication against the action of normal gastric juices, yet disintegrates readily in the intestinal environment. Thus, gastric irritation in sensitive patients is avoided.

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Now! TUBADIL*

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In the July 1st, 1950 (p. 791) **Journal of the American Medical Association,** Dr. J. D. Fuller reports his results with **TUBADIL** in treating the pain resulting from traumatic injury:

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(Continued from Page 951)

17. **The American College of Surgeons Committee on Nutrition of the Surgical Patient** will meet for luncheon on Friday, September 22, Parlor K, Book-Cadillac Hotel, Detroit, at 12:00 noon.

18. **The Michigan State Medical Assistants Society** will hold its annual meeting at the Detroit Leland Hotel, Wednesday and Thursday, September 20-21, with registration beginning on Wednesday at 9:30 a.m. in the lobby.

    A movie on "The Care and Use of Syringes" will open the program at 10:00 a.m. in the Aviation Room of the Leland. The first presentation will be made by Hugh W. Brenneman, Public Relations Counsel of the Michigan State Medical Society, Lansing, who will speak on "Co-operation with the American People." Mr. Harry Ginty of the Medical Protective Company, Fort Wayne, Ind., will speak on "Some Interesting Cases Across Our Desk."

    A tour of Michigan Medical Service, and a visit to the MSMS exhibits in the Book-Cadillac Hotel, will occupy the time from 3:30 to 5:30 p.m.

    The banquet in the Detroit Leland Hotel will be held September 20 at 7:00 p.m. in the Jade Room. Miss Mary Louise Goodson of John Powers School of Charm will address the group on "My Ideal of Beauty is a Natural Woman."

    Thursday's program will begin with a talk by A. E. Skaggs of Battle Creek on "Good, Bad and Indifferent Records." Charles B. Audette of Detroit will explain "Short Cuts in Typewriting." Lorene Babcock, Director of Public Relations for Children's Hospital of Michigan will speak at 11:00 a.m.; her subject: "On Detroit's Doorstep."

    A luncheon at the David Whitney House, 4421 Woodward, Detroit, will end the program. A business meeting and election of officers will follow the luncheon.

* * *

♦ **SIX ASSEMBLIES AND ONE GENERAL MEETING**—Wednesday, Thursday, Friday, September 20-21-22. See Pages 953-962.

* * *

♦ **THE BRUCE PUBLISHING COMPANY, Saint Paul, Minnesota,** long-time publisher of THE JOURNAL of the Michigan Society, contributed the attractive and useful notebooks presented to every registrant at the MSMS Annual Session, Detroit, September, 1950.

Many thanks, Bruce Publishing Company.

* * *

The Discussion Conference on Medicine of Wednesday, September 20, in the Esquire Room, Book-Cadillac Hotel featuring C. A. Doan, M.D., of Columbus, Ohio, will be held **from 4:00 to 5:00 p.m.** (not from 5 to 6 p.m.), to accommodate Dr. Doan who must be in Washington, D. C., early September 21 for important work on government assignments.

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Communication

Dear Doctor Haughey:

As Commissioner of the Michigan Department of Health, I am concerned about some information which is contained on the birth certificates received which I do not believe is representative of the high level of medical practice present in this state.

In 9 per cent of the birth certificates which we receive, it was either indicated that the blood test was not performed or the space provided for this information was left blank. I feel quite confident that the prenatal blood test is carried out nearly 100 per cent of the time by Michigan physicians, and yet the records signed by the doctors do not substantiate this.

Information on birth certificates also gives no evidence of the prophylaxis being used in the eyes of newborn infants in 2 per cent of the cases. Again I do not believe that this information is a true reflection of the high level of medical care that is given in this state.

In my opinion, both of the items in question have for the most part been omitted through an oversight.

I respectfully solicit the co-operation of your Society in emphasizing to its members the importance to the practicing physician of Michigan not only of having the required procedures carried out but also of having the action duly recorded.

More accurate recording of these matters will give us tangible evidence of the good level of practice which we believe is now being carried out, and it will also enable us to provide you with more accurate statistical material.

Very truly yours,

ALBERT E. HEUSTIS, M.D.
Michigan Department of Health

July 12, 1950

MICHIGAN'S DEPARTMENT OF HEALTH

(Continued from Page 986)

"Your Food," the Michigan Department of Health's pamphlet on food facts for lay people, has been revised and is now ready for distribution. The pamphlet deals with food selection, food values, body needs, meal planning and hints on economical buying. A copy or copies may be obtained by writing to the Michigan Department of Health, Lansing 4, Michigan.

* * *

The mental health aspects of vacationing, the choosing of a child's summer camp, a resort or restaurant, vacation hazards and summer cookery are among the subjects discussed in the Vacation issue of *Michigan Public Health*. A single copy of the Vacation issue or a free subscription to the bulletin may be secured by writing to the Michigan Department of Health, Lansing 4, Michigan.

* * *

The history of liberty is a history of limitations of government power, not the increase of it.—WOODROW WILSON.

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Michigan Authors

John W. Towey, M.D., F.A.C.P., published an article, "Don'ts in the Clinical Management of Tuberculosis" in *The General Practitioner of Australia and New Zealand,* May 15, 1950.

William S. Reveno, M.D., published an article, "Present Status of Antithyroid Therapy," in *The General Practitioner of Australia and New Zealand,* May 15, 1950.

G. D. Jay, III, M.D.; R. R. Margulis, M.D.; A. B. McGraw, M.D., and **R. R. Northrip, M.D.,** Detroit, published an article, "Meckel's Diverticulum: A Survey of One Hundred and Three Cases," in the *Archives of Surgery,* July, 1950.

— Vote at the Primaries on September 12 —

The Second Annual Symposium on Physical Medicine and Rehabilitation sponsored by Bay County Medical Society, Grace Hospital and Wayne University, Detroit, Bay City General Hospital Medical Staff and its Committee on Physical Medicine, was held at Wenonah Hotel, Bay City, Wednesday, April 26, 1950.

Frederick G. House, M.D., Director Department of Physical Medicine, St. Joseph Hospital, Ann Arbor, was chairman of the afternoon session. The program included:

Address of Welcome

M. J. Dardas, M.D., Chief of Staff, Bay City General Hospital.

Mana Kessler, M.D., Chairman Committee on Physical Medicine, Bay City General Hospital.

"Physical Medicine and Rehabilitation in Poliomyelitis"

Morton Hoberman, M.D., Columbia University Medical Center, New York.

"Control of Spasm in Poliomyelitis"

W. D. Paul, M.D., State University of Iowa, Iowa City, Iowa.

"Physical Medicine and Rehabilitation in General Practice"

Section on Physical Medicine, Mayo Clinic, Rochester, Minnesota.

"Hemiplegia: Neurosurgical Management"

E. S. Gurdjian, M.D., Wayne University, Detroit.

"Hemiplegia: Medical Management"

M. K. Newman, M.D., Wayne University, Detroit.

At 5:00 P.M. a social hour and preprandial refreshments were enjoyed at Bay City General Hospital, after which inspection of the Department of Physical Medicine and Rehabilitation was made.

The evening session followed a dinner served at the Wenonah Hotel.

Address of Welcome

E. A. Cederberg, Mayor, Bay City

George Mac Phail, City Manager

D. J. Mosier, M.D., President Bay County Medical Society

"Physical Medicine and Rehabilitation in Fractures"

M. A. Knapp, M.D., University of Minnesota, Minneapolis, Minnesota.

"Present Concept of Physical Medicine and Rehabilitation"

Allen H. Russek, M.D., New York University, New York.

This symposium was developed by the committee on physical medicine of the Bay City General Hospital with the co-operation of the agencies mentioned above.

— Vote at the Election of November 7 —

A Medical-Military Symposium for officers of the Fourth Naval District will be held at the U. S. Naval Hospital, Philadelphia, from October 23 to 28, to keep Military Reserve Medical Officers of the Armed Forces, Army, Navy and Air Force, posted on the latest developments in the field of medical science. All members of the medical profession are cordially invited to attend as the symposium is not restricted to medical officers of the armed forces. For complete program and applications for hotel reservations and for the Penn-Navy football game of October 28, write—M. H. Porterfield, Commander, MCR, USNR, U. S. Naval Base, Philadelphia 12, Pa.

The number of tuberculosis cases is more truly a measure of the tuberculosis problem than the number of tuberculosis deaths. Michigan's tuberculosis case load is not diminishing. The 1949 total of 5,953 new cases reported is a little lower than the average for the preceding ten years, which was 5,982, and slightly higher than the yearly average for the next earlier ten-year period, which was 5,910. Effective tuberculosis control requires that every tuberculosis case be properly supervised.

Michigan Tuberculosis Association

At the San Francisco meeting of the American Medical Association, 10,119 Fellows and members were present. The total registration was 23,655.

Elmer L. Henderson, M.D., Louisville, Kentucky, assumed the presidency of the AMA; John W. Cline, M.D.,

(Continued on Page 998)

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(Continued from Page 996)

of San Francisco, became the new President Elect. F. F. Borzell, M.D., Philadelphia, was made Speaker of the House of Delegates, J. R. Reuling, M.D., Bayside, N. Y., Vice Speaker, and George F. Lull, M.D., re-elected as Secretary and General Manager.

Leonard W. Larson, M.D., of Bismarck, N. D., and Thomas P. Murdock, M.D., of Meriden, Conn., were elected to the Board of Trustees.

Howard A. Rusk, M.D., of the *New York Times,* summed up the AMA meeting with this sentence: "One was impressed with the thousands of hours of effort and research that had gone into the papers, exhibits and demonstrations, the motivation for which was the desire for knowledge and truth."

The 1951 meeting will be held in Atlantic City, June 11-15; the 1952 meeting will be held in Chicago, and the 1953 meeting in New York City.

— Vote at the Primaries on September 12 —

SECOND MICHIGAN CANCER CONFERENCE

October 18, 1950

Hotel Pantlind, Grand Rapids

Purpose of Meeting

To extend knowledge of cancer and explore ways and means for better control measures in Michigan.

A.M.	*Morning Session—Schubert Room*
10:00	Registration
10:30	Cancer Control in Michigan A. E. Heustis, Commissioner, Michigan Department of Health, Lansing
10:50	Physical Examinations in Industry as a Cancer Case Finding Procedure C. D. Selby, M.D., School of Public Health, Ann Arbor
11:10	Cancer Research J. R. Heller, M.D., Director, National Cancer Institute, Bethesda, Md.
11:30	Individual Responsibility in Cancer Control Prof. Paul D. Bagwell, Michigan State College, East Lansing
P.M.	*Afternoon Session—Furniture Club*
12:30	Luncheon.* Followed by a question period and round-table discussion.
2:00	Adjournment

*Luncheon tickets should be purchased when registering.

— Vote at the Election of November 7 —

The Third National Diabetes Detection drive of the American Diabetes Association will be conducted November 12 to 18, 1950.

The Diabetes Detection Drive should not only find unknown diabetics but should also stress the importance of treatment and guidance by doctors, as the known diabetic who was neglected treatment is as serious a problem as the unknown diabetic.

Remember the dates of the 1950 Diabetes Detection Drive; November 12 to 18.

— Vote at the Primaries on September 12 —

R. Wallace Teed, M.D., Ann Arbor, has presented the following talks on socialism and socialized medicine

(Continued on Page 1000)

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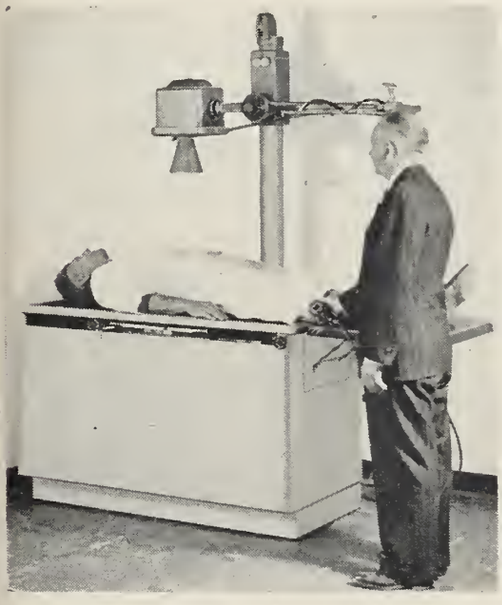

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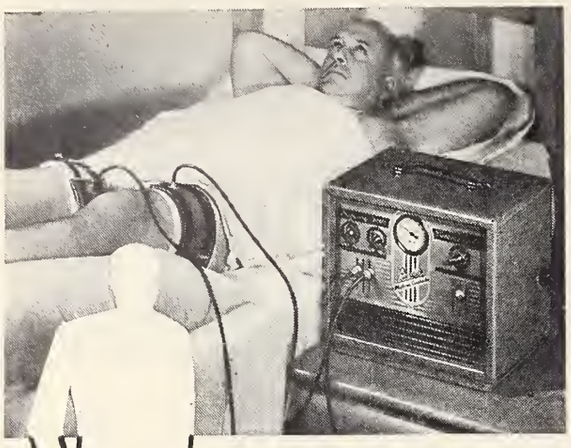

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(Continued from Page 998)

during the past year: January 19—Phi Chi Wives, Ann Arbor; February 13—P.T.A., Slauson School, Ann Arbor; March—Kiwanis Club, Monroe, Radio Program over WHRV with Dr. DeTar; April—Kiwanis Club, Dexter and Lions Club; May 4—Forum, Dexter; May 21—Unitarian Study Group, Ann Arbor; May 22—Wayne University Senior Medical School Class; May 31—Faculty Men's Discussion Club; June 22—Michigan State Normal College, Ypsilanti; June 26—Kiwanis Club, Chelsea; July—Radio Station WHRV, Ann Arbor.

COMMITTEE REPORTS

(Continued from Page 984)

Michigan Chapter of the Arthritis and Rheumatism Foundation also contributed to the program.

A research project proposed by the committee has been temporarily tabled.

The committee wishes to express its gratitude to the local chairmen and their committees for their untiring effort in continuing the Rheumatic Fever Control program in all its ramifications at the local level.

Respectfully submitted,
FRANK VAN SCHOICK, M.D., *Chairman*
MR. P. C. ANGOVE
D. R. BOYD, M.D.
N. E. CLARKE, M.D.
W. B. COOKSEY, M.D.
CARLETON DEAN, M.D.
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Surgical Technic, Surgical Anatomy and Clinical Surgery, four weeks, starting August 7, September 11, October 9.
Personal Course in General Surgery, two weeks, starting September 25.
Surgery of Colon and Rectum, one week, starting September 11.
Esophageal Surgery, one week, starting October 16.
Breast and Thyroid Surgery, one week, starting October 2.
Thoracic Surgery, one week, starting October 9.
Gallbladder Surgery, ten hours, starting October 23.
Fractures and Traumatic Surgery, two weeks, starting October 9.
Basic Principles in General Surgery, two weeks, starting September 11.
GYNECOLOGY—Intensive Course, two weeks, starting September 25.
Vaginal Approach to Pelvic Surgery, one week, starting September 18.
OBSTETRICS—Intensive Course, two weeks, starting September 11.
MEDICINE—Intensive General Course, two weeks, starting October 2.
Gastro-enterology, two weeks, starting October 16.
Gastroscopy, two weeks, starting September 11 and October 23.
Electrocardiography and Heart Disease, four weeks, starting October 2.
DERMATOLOGY—Formal Course, two weeks, starting October 16.
Informal Clinical Course every two weeks.
UROLOGY—Intensive Course, two weeks, starting September 25.

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A PRIMER FOR DIABETIC PATIENTS. An outline of Treatment for Diabetes with Diet and Insulin including Directions and Charts for the Use of Physicians in Planning Diet Prescriptions. By Russell M. Wilder, M.D., Ph.D., F.A.C.P., Professor and Chief of the Department of Medicine of the Mayo Foundation, University of Minnesota; Senior Consultant in the Division of Medicine, Mayo Clinic. Ninth Edition. Philadelphia: W. B. Saunders Co., 1950. Price $2.25.

Dr. Wilder presents a new edition of his book that has been such a help to the practitioner when placed in the hands of his patient. It answers questions that are bound to arise, gives diets, reasons for certain usages and treatment. It is a valuable aid in management of the diabetic.

HAROFÉ HAIVRI, The Hebrew Medical Journal. Published at 983 Park Avenue, New York.

The appearance of Volume 1, 1950, of *The Hebrew Medical Journal* (Harofé Haivri), inaugurates the 23rd year of its publication under the editorship of Moses Einhorn, M.D.

Written in Hebrew, with English summaries, the Journal is a contribution to improving the health of the new State of Israel, aiding as it does the development of Hebrew medical literature, and thus the newly established Hebrew University-Hadassah Medical School.

In the current number, a symposium is presented on various phases of disease and health in Israel. Among the articles of interest are "Orthopedic Problems in Israel" by I. Pulvermacher, M.D., "Fighting Deafness in Israel" by Ahron Schwarzbart, M.D., and "Kupat Holim—The Labor Health Service in Israel" by Moshé Rabinowitz, director of Kupt Holim in Tel Aviv.

In the section on Bible and Medicine, Dr. C. Gen-

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azzani presents a unique essay on "Pathological Symptoms caused by the Famine during the Siege of Jerusalem by Nebuchadnezzar, King of Babylon." In the section on Old Hebrew Medical Manuscripts, Dr. Zussman Muntner of Jerusalem presents a historical article on "Ascites —A 10th Century Manuscript" by Yizchak Ben Shlomo Ha-Yisraeli. In addition, under the heading of Personalia, are presented biographical sketches on the life and works of Professor Hermann Strauss and Dr. Howard Lilienthal, noted American surgeon.

WORLD SURGERY, 1950. By Stephen A. Zieman, M.A., M.D., F.A.C.S., F.I.C.S., Abstract and news Editor, International College of Surgeons. Abstractor for International Abstracts of Surgery, Gynecology and Obstetrics, formerly Assistant Chief, Bureau of Publications, U. S. Naval Medical Department, and Assistant Editor U. S. Navy Medical Bulletin. 53 Illustrations. Philadelphia, London, Montreal: J. B. Lippincott Company, 1950. Price $6.00.

The editor is a well-trained abstractor, wise in the selection of subjects and illustrations. He has chosen unusual and interesting subjects, also the unique. The whole field of surgery is sampled. Gastro-intestinal, cardiovascular, gynecology, orthopedics, genito-urinary, neurosurgery and psychology, ophthalmology and oto-laryngology, head and neck. Under the heading "Miscellaneous," he covers anesthesia, radiology, preoperative and postoperative care, blood substitutes and antibiotics. Excellent illustrations give complete details. References are given for further study.

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BLUE SHIELD MEDICAL CARE PLANS

(Continued from Page 908)

usually have majority representation on the board. A recent Blue Shield survey showed that the average composition of all Blue Shield boards was two-thirds doctors and one-third laymen.

The administration of medical plans is of much the same character as that of Blue Cross plans. Enrollment, billing, and maintenance of subscriber records are usually handling for both plans by the same staff personnel. There is usually one executive director (virtually always a layman) for both plans. Most medical plans have a professional committee or a medical director, to review claims and arbitrate cases where there is a question as to the propriety of the fee.

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of the Michigan State Medical Society

VOLUME 49 SEPTEMBER, 1950 NUMBER 9

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of the Michigan State Medical Society

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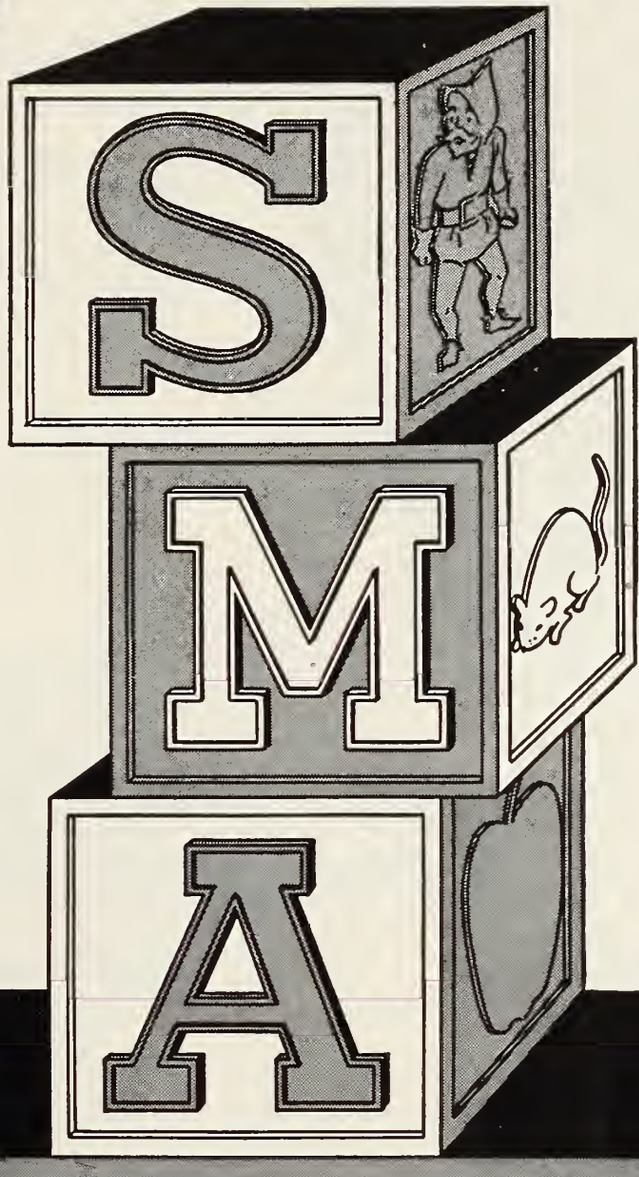

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MEDICAL MEETINGS AND CLINIC DAYS

Known medical meetings and clinic days, sponsored by MSMS and county medical societies and other physicians' groups in Michigan for 1951 are as follows:

January 31	Mt. Carmel Mercy Hospital Clinic Day Detroit
February 8	Jackson County Medical Society's Clinic Day Jackson
March 6	Calhoun County Medical Society's Clinic Day Battle Creek
March 14-15-16	MICHIGAN POSTGRADUATE CLINICAL INSTITUTE Detroit
March 17	Second Annual Michigan Health Day sponsored by Michigan Heart Association Detroit
April 4	SECOND MICHIGAN INDUSTRIAL HEALTH DAY Detroit
April 11	Genesee County Medical Society's Cancer Day Flint
May 3	Ingham County Medical Society's Clinic Day Lansing
May	Western Michigan Clinic Day (Sponsored by Kent County Medical Society) Grand Rapids
May	Bay County Medical Society Physical Medicine Conference Bay City
June	St. Clair County Medical Society's Clinic Day St. Clair
July 26-27	Annual Coller-Penberthy Medical-Surgical Conference (sponsored by Grand Traverse-Leelanau-Benzie County Medical Society) Traverse City
September 26-27-28	MICHIGAN STATE MEDICAL SOCIETY ANNUAL SESSION Grand Rapids
October	Third Michigan Cancer Conference (sponsored by MSMS Cancer Control Committee) (Place not decided)

Additions to this list of meetings are invited by the Editor of JMSMS, in order to make this monthly announcement complete and accurate.

— Good Americans Will Vote November 7 —

AMA DUES FOR 1951

The AMA dues for 1951 were set by the AMA House of Delegates in San Francisco (June, 1950) at $25, which will include a subscription to the JOURNAL of the AMA. Fellowship in the Seientific Assembly dues were set at $2 per year. Fellows may elect to take a special journal in lieu of JAMA.

The AMA Clinical Session will be held in Cleveland (not Denver), December 5 to 8, 1950, with all activities housed in the Cleveland Public Auditorium, except the meetings of the House of Delegates.

— Get Out The Vote —

BRITISH DOCTORS WANT TO QUIT NATIONAL HEALTH SERVICE

The AMA Secretary's Letter for July 31, 1950, carried the following comment on the present situation in Britain.

"British doctors are becoming more and more fed up with red tape under the British National Health Act.

"Last week newspapers reported that delegates to the annual meeting of the British Medical Association adopted a resolution urging preparations for a withdrawal from the system because of delay in negotiations on payment of general practitioners.

"General practitioners now are paid from a pool calculated at a yearly rate of $2.52 a head of 95 per cent of the population, known as a capitation fee.

"For the current year this pool is about $112,000,000 and the amount paid to each doctor depends on the number of patients he has under the system.

"The doctors contend that the pool should be increased by $46,200,000 a year from that of July, 1948, when the scheme began, and that the capitation fee should not be fixed but be on a sliding scale.

"One delegate told newsmen that doctors had been turned into form-filling drudges, that the health service was in a mess and that it was getting worse."

— Vote on November 7 —

MSMS EMERGENCY MEDICAL SERVICE COMMITTEE ACTIVE

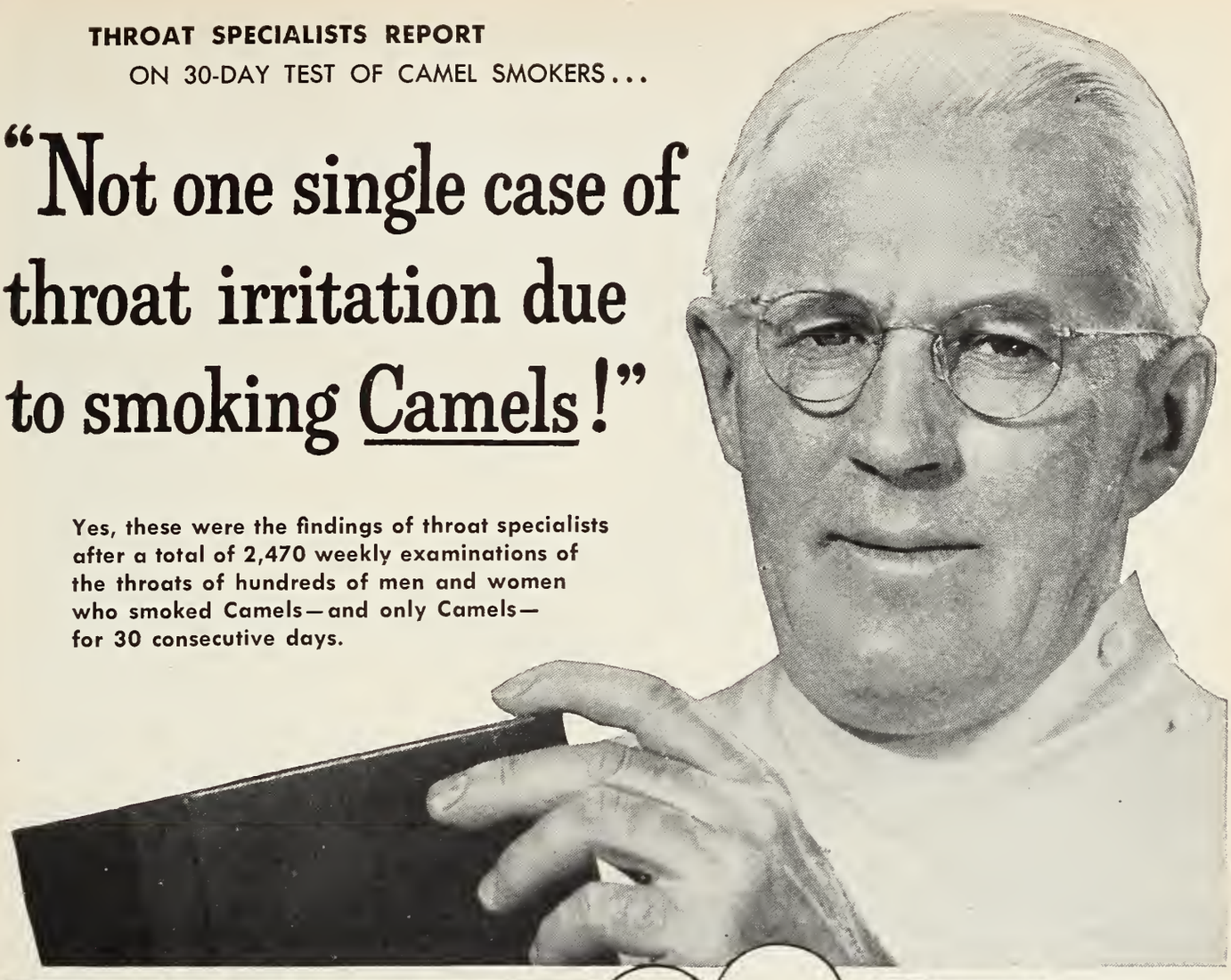
The EMS Committee of the State Medical Society, headed by H. F. Becker, M.D., Battle Creek, presented several recommendations to the Executive Committee of The Council on June 14, some of which are listed below:

1. That the Secretary's Letter urge that the County Societies plan one meeting during the year 1950-51 on Civil Defense. That they be informed that this committee will supply them with a list of speakers on the

(Continued on Page 1018)

THROAT SPECIALISTS REPORT
ON 30-DAY TEST OF CAMEL SMOKERS...

"Not one single case of throat irritation due to smoking Camels!"



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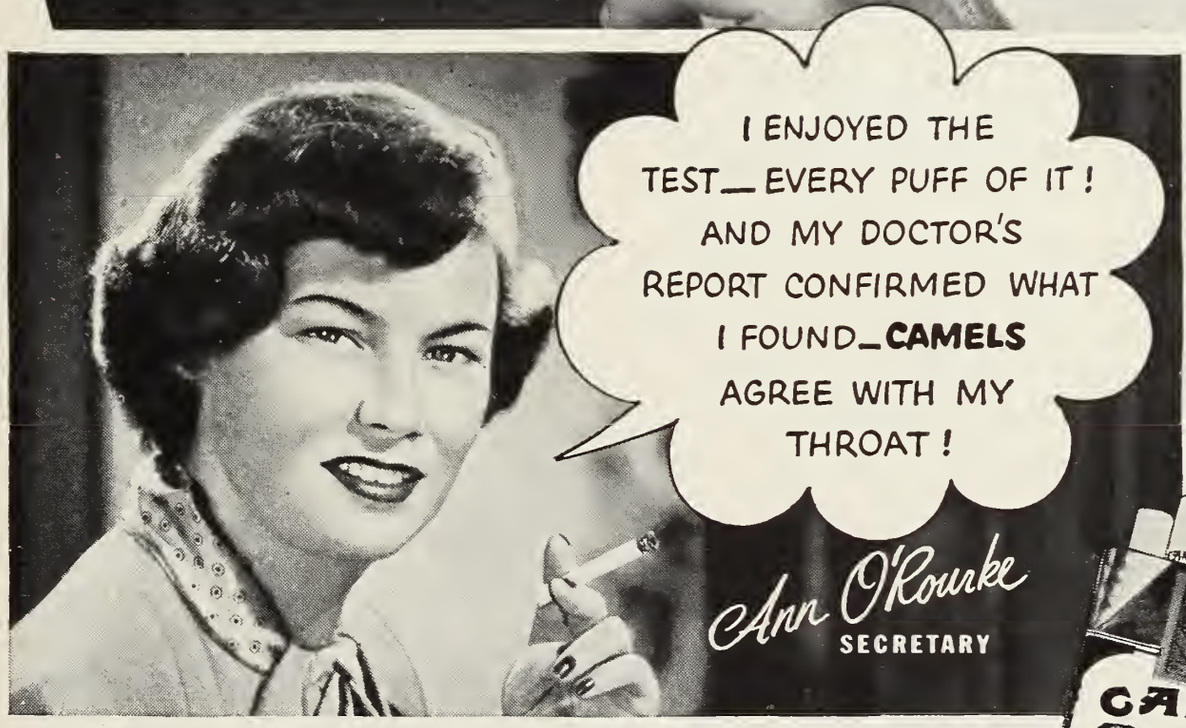

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MSMS EMERGENCY MEDICAL SERVICE COMMITTEE ACTIVE

(Continued from Page 1016)

general subject of Civil Defense and also a list of speakers competent to talk on the general subject of Atomic Casualties.

2. That The Council contact the University of Michigan and/or Wayne University with the request that short courses on Atomic Casualties be set up. If such a course can be established, an attempt should be made to have at least one member from each county society in attendance . . . the correct procedure in that event would be through the influence of the Secretary's Letter and THE JOURNAL.

3. That contact be made with the Michigan Hospital Association to get a hospital planning program in operation.

4. That surgical supply houses be contacted re the possibility of their attempting an estimate of their normal stock of surgical supplies.

5. That the druggists associations of the state (both state and local) be requested to furnish similar information re supplies of biologicals, narcotics, and antibiotics.

HIGHLIGHTS OF MIDSUMMER SESSION OF THE COUNCIL

July 16-17-18, 1950

- Monthly Financial Reports as approved by the Finance Committee were adopted by The Council.
- The Report of Treasurer A. S. Brunk, M.D., plus the semi-annual authenticated report on MSMS bonds also were approved.
- The Annual Reports of the Commission on Healing Arts were received and referred to the MSMS House of Delegates for consideration in September, 1950.
- Council Chairman O. O. Beck and Councilor-Editor Wilfrid Haughey were thanked for their successful intervention and work in solving a problem in connection with Blue Cross.
- Survey of Michigan State Veteran's Facility at Grand Rapids. Following the invitation of the Michigan Civil Service Commission, the Council authorized the appointment of a committee to make this survey and approved the personnel as appointed by Council Chairman O. O. Beck, M.D.: R. J. Hubbell, M.D., Kalamazoo, Chairman, E. B. Cudney, M.D., Pontiac, H. C. Hansen, M.D., Battle Creek, C. A. Paukstis, M.D., Ludington, and R. W. Teed, M.D., Ann Arbor.
- Grand View Hospital, Ironwood: two recent opinions by the Michigan Attorney General re the right to practice in this hospital, created under the special county hospital act, were thoroughly discussed. The matter was referred to the Councilor of the District to investigate, and if he so wishes, the problem is to be referred back to the MSMS Council.
- Harry F. Becker, M.D., Battle Creek, and C. E. Umphrey, M.D., Detroit, were appointed by President Barstow to the Technical Committee on Medical and Health Matters, a sub-committee of the Governor's Civil Defense Committee; these appointments were approved by The Council.
- E. A. Osius, M.D., M. R. Burnell, M.D., and Mr. J. Joseph Herbert were appointed as a Liaison Committee with the Jurisprudence Committee of the State Bar of Michigan, in response to an invitation by the State Bar; these appointments were confirmed by The Council.
- Rules for vacations and sick leave for MSMS office personnel, as developed by the Secretary, were presented and approved.
- Sarah E. Schooten, M.D., Detroit, was reappointed as MSMS representative on the Committee on Careers in Nursing of the Michigan Nursing Center Association; this appointment was confirmed by The Council.
- The suggestion of the Editor that Leon DeVel, M.D., Rheumatic Fever Control Coordinator, be invited to submit monthly articles for JMSMS on rheumatic fever and on heart disease subjects, was approved by The Council. The Editor also reported that the July, August and September numbers of JMSMS would feature a four-page color insert, two pages devoted to activities of the MSMS Good Citizenship Campaign and two pages to a progress report on Blue Cross-Blue Shield.
- Signing of birth certificates. Legal Counsel J. Joseph Herbert reported that the Michigan physician who failed to sign birth certificates should be informed that the law on this subject must be obeyed.
- Public Relations Counsel, H. W. Brenneman, presented a progress report on (a) the Good Citizenship Campaign; (b) MSMS films; (c) Publicity for the MSMS Annual Session September, 1950; (d) Upper Peninsula CAP meeting of June 23; (e) Completion of MSMS Speaker's Manual.
- The following committee reports were given consideration: Special Committee on Education, meeting of July 6; Tuberculosis Control, meet-

(Continued on Page 1020)

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MIDSUMMER SESSION OF THE COUNCIL

(Continud from Page 1018)

ing of May 21; the Desk Card as developed by the T.B. Control Committee was amended in one item and ordered printed and mailed to all MSMS members; Joint Committee on Study of Medical Practice Act, meeting of June 18; Permanent Conference Committee, meeting of June 28; Committee on Mental and Social Problems, meeting of July 12; Rheumatic Fever Control Committee, meeting of July 16 (including monthly progress report of Rheumatic Fever Control Coordinator DeVel; Committee on Atomic and Allied Procedures, meeting of July 10.

- The Finance Committee studied the quarterly financial report of the Cancer Control Committee; it recommended the broadcasting of the MSMS Annual Session talk of Elmer L. Henderson, M.D., AMA President; commemoration of 20th Anniversary of the Founding of the Medical Exhibitors Association in Detroit, as part of MSMS Annual Session also was recommended.
- The report of the Publication Committee included (a) a discussion of policy on national Journal accounts; (b) report on June 30 meeting of State Journals Advertising Bureau Advisory Committee; (c) request of Eli Lilly for advertisement on front cover of JMSMS; (d) printing complete Roster in JMSMS; and (e) recommendations to Editor Haughey for 1951 Journal covers.
- The report of the County Societies Committee included (a) membership status of a Berrien County practitioner; and (b) membership status of a practitioner in Manistee County.
- The Annual Report of The Council read *in toto,* amended in several places, approved, and referred to the House of Delegates in September, 1950.
- The annual joint meeting with members of the Michigan Crippled Children Commission was held, during which three items were discussed: (a) physicians' billing parents in addition to Commission—contrary to law; (b) Medical Advisory Committee to MCCC (Grover C. Penberthy, M.D., Detroit, C. E. Badgley, M.D., Ann Arbor, Frank Van Schoick, M.D., Jackson, and W. H. Steffensen, M.D., Grand Rapids; (c) certified court order necessary to limit the number of cases to meet decreased appropriations.
- Reporting of communicable diseases. A special committee of The Council was appointed to meet with Michigan Health Commissioner A. E. Heustis, M.D., and Legal Counsel J. Joseph Herbert to discuss this subject. Subsequently, the Committee recommended that a conference be held between representatives of the Michigan Pathological Society, Michigan Department of Health, and a representative of the MSMS Council, in an attempt to resolve any problems existing in the reporting of communicable diseases.
- A joint meeting with the Michigan Health Council was held for a discussion of the work of the Council. This included reports by Chairman J. S. DeTar, M.D., O. K. Engelke, M.D., Gordon Goodrich, Mrs. Marjorie Karker, Secretary H. W. Brenneman and Executive Secretary Eugene H. Wiard.
- Nominations for the Board of Michigan Medical Service to represent the Michigan State Medical Society, were transmitted to MMS through Past President E. F. Sladek, M.D., Traverse City.
- A joint meeting with the Board of the Michigan Hospital Association was held during which the following items were discussed: (a) hospital licensing; (b) six districts of MHA in Michigan; (c) resident program in hospitals; (d) insufficiency of interns; (e) the necessity for something like costs payable to hospitals for the care of state cases; and (f) problem at Grand View Hospital, Ironwood. These subjects were referred to the Liaison Committee with the Michigan Hospital Association.
- The annual joint meeting with the Board of Michigan Hospital Service and of Michigan Medical Service was held, and mutual problems and ambitions were discussed.

* * *

NATIONALIZED MEDICINE

To the Editor of *The Times:*

Sir—The Medical Practitioners' Union has been deeply concerned with the deterioration that has taken place in the standards of general practice since the National Health Service started.

Everyone will agree that there are at least four important factors which have contributed to this state of affairs. First, there has been a scramble for patients by

(Continued on Page 1022)

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in december

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NATIONALIZED MEDICINE

(Continued from Page 1020)

doctors whose income depends upon the size of their lists; secondly, there has been no demand or inducement for a doctor to better his equipment or surgery premises; thirdly, there is no special tendency for doctors to form group practices either in their own premises or in health centers; and, fourthly, the personal practitioner and hospital services are becoming increasingly remote from one another. It is frustrating to all those connected with the health service (and we all are in one way or another) to read reams of correspondence and sheaves of articles diagnosing the ills without seeing any prospect of a cure being found.

We can at least all agree that the correction of the present evils will call for action at the highest level, and that this action is urgently needed both to safeguard the future of British medicine and to satisfy the public requirements for a fine health service. But no action can be expected until detailed investigation has been made of existing conditions. The recent appointment of a committee of the Central Health Services Council to examine the co-ordination of the three branches of the National Health Service was one indispensable step which received all too little attention. The second step should be the appointment of another committee of the same body to examine the internal structure of general practice.

Admirable though the British Medical Association's report, "General Practice and the Training of the General Practitioner," was, it concerned itself more with the quality of the general practitioner and his training than with his practical difficulties. Three vital questions still remain to be answered. What system of payment can be devised which will encourage good medical practice? How can the proper medical equipment and premises be secured for the practitioner? By what method can group practice and collaboration between practitioners be brought about? When these investigations are complete, the remedies should be clear, and with all facts and logic arrayed the case can be presented to the Minister or to Parliament for action.

Yours faithfully,
BRUCE CARDEW, General Secretary,
Medical Practitioners' Union
55 and 56, Russell Square, W.C.I.,
June 7.—*The Times,* London.

COMPANION URGES COUNTRY TO ADOPT HILLSDALE CANCER-PREVENTION PLAN

The success of the Hillsdale County (Mich.) cancer-prevention plan is told by Clive Howard in his article "How to Prevent 100,000 Cancer Deaths a Year" in the September *Woman's Home Companion.*

Medical science has reached the point where it can save two patients out of every three afflicted with cancer, but the tragedy is that we are saving only one of the three and letting a hundred thousand people a year die needlessly, the article states.

The answer to this tragic problem, says the author, is the practical method adopted by Hillsdale County in 1947—every doctor's office a cancer-detection center. Hillsdale County has set an example which the whole nation should take to heart and which the whole nation could easily follow, the article states.

The plan, which was suggested by Dr. Norman Miller of the University of Michigan and chairman of the state's Cancer Control Committee, was put into effect only after it had been discovered that sixty-nine of Hillsdale's hundred and forty-six known cancer cases died within a year.

This terrible mortality rate was traced to the fact that about seventy per cent of the patients had waited too long before consulting a doctor. It was also found that sixty per cent of all the cases could have been discovered right in a doctor's office—but they weren't.

Hillsdale County made up its mind to remedy this tragic situation by making every doctor's office a cancer-detection center. Local doctors called in four lecturers from the University of Michigan to give them a refresher course in cancer detection of the skin, breast, womb and rectum. When the courses were finished every doctor knew the most advanced methods of discovering an early cancer.

The next step was to arouse public interest. News went out that full cancer examinations were available at the same cost as any other physical examination.

Today in Hillsdale cancer fear has been replaced by knowledge; terror, by optimism. The idea of undergoing a pelvic examination to seek cancer of the cervix no longer holds fear or shame for the women of Hillsdale. Because everyone does—it's a commonplace.

"Just think of it," one Hillsdale doctor told the author, "we are finding twice as many cases as we used to in the early stages when treatment is almost always successful. We are letting only half as many cases reach the almost hopeless stage. If this work cost thousands of dollars and took up a full day a week of every doctor's time, it would still be worth doing. But it costs practically nothing, and not one of us is any more pressed for time than he was before."

In other parts of the country, however, the trend has been in the other direction. If we are to apply what we know about cancer and start saving a hundred thousand lives a year, the article states, doctors and the public must become more alert than ever. The Hillsdale plan, it says, looks like the best method.

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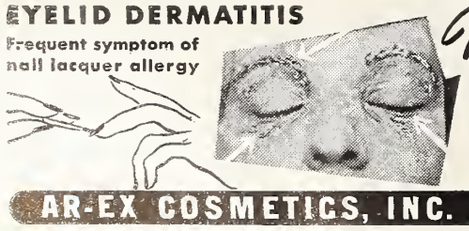

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Cancer Comment

SECOND MICHIGAN CANCER CONFERENCE

The Second Michigan Cancer Conference will be held at the Pantlind Hotel, Grand Rapids, on Wednesday, October 18, beginning at 10:00 a.m.

Four speakers during the morning will include A. E. Heustis, M.D., Michigan Health Commissioner on "Cancer Control in Michigan"; C. D. Selby, M.D., School of Public Health, Ann Arbor, on "Physical Examinations in Industry as Cancer Case Findings Procedures." J. R. Heller, M.D., Public Health Service, Bethesda, Md., on "Cancer Research"; and Prof. Paul D. Bagwell, Michigan State College, East Lansing, on "Individual Responsibility in Cancer Control."

Luncheon at 12:30 p.m. will be followed by questions and general discussion.

The Second Michigan Cancer Conference will be adjourned at 2:00 p.m.

All members of the Michigan State Medical Society are cordially invited to attend. No registration fee.

The annual training school of the Michigan Division, American Cancer Society, will follow immediately after the Conference.

CANCERPHOBIA

There are two types of cancerphobia and both pose distinct problems to the physician in regard to their treatment. One type may cause the patient to delay a positive diagnosis of his suspected cancer; the other is represented by the neurotic individual who seeks repeated medical assurance that cancer is not present but who can always dream up a group of symptoms that spell cancer when no cancer can be found by the most careful examination.

The first type of cancerphobia is of far more serious consequences to the patient and his family in that it causes needless and fatal delays in seeking treatment. These patients constitute a not inconsiderable part of the annual death toll from this disease. Such patients are so constituted mentally that they cannot face unpleasant realities. They think that in concealing their known or suspected cancer from their families and others, they are saving undue worry to their loved ones and will make for happier home life. They cannot face the thought of the disability and costs entailed in surgical procedures, or the disruption of plans for the future welfare of the family. They are willing to assume the martyr role with its inevitably fatal ending, rather than face up to the real situation. By appropriate educational measures such individuals often can be brought to see the danger of their attitude. They must be taught that it is wiser to face "a dreadful certainty than an uncertain dread." There is real hope for many of these patients when their ignorance is replaced by information, for too often their attitudes have arisen out of the misleading myths and legends that dominated thinking about the disease in earlier times. In this re-education, the physician plays a vital role. Sound psychiatric therapy has much to offer these patients.

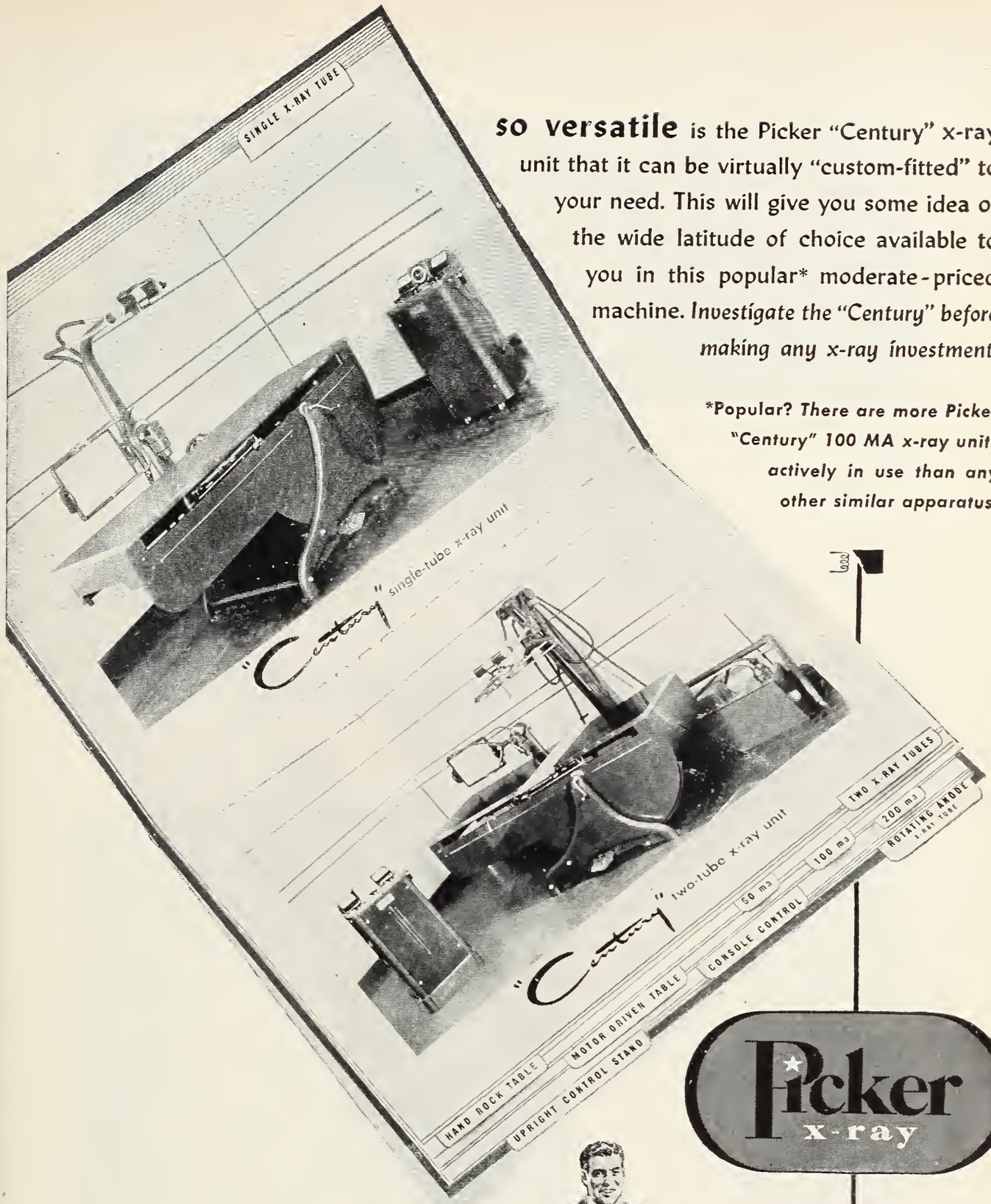
The neurotic patient who is always suffering from imaginary illness presents a different problem. His attention flits from one type of illness to another depending on current publicity of medical problems. With the great amount of publicity now devoted to cancer, this subject engages his attention. Such patients must have repeated assurance that they have no evidence of cancer, but will accept such assurance for brief periods only. Frequent reassurance is necessary but often futile.

Because of their over-emphasis on their fancied cancer symptoms and their insistent demands for medical attention, they loom much larger in the minds of some physicians than their actual numbers warrant. A survey made several years ago in hospitals seeing large numbers of cancer patients indicated that not more than two per cent of such patients could be classed as cancerphobes. The other 98 per cent had real problems demanding attention.

The least contribution a physician can make to the welfare of the patient with cancerphobia is to recognize the problem, examine the patient carefully, explain the negative findings and, when such procedures are insufficient to satisfy the patient, refer him for psychiatric attention. Some salvage may be expected but probably not as large as with the other type discussed previously.

Too often an intelligently informed person's

(Continued on Page 1088)



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Upper Peninsula CAP Leaders Hold Midsummer Session

Pictured above are the principals who appeared at the "Good Citizenship Campaign" booster session held during the annual meeting of the Upper Peninsula Medical Society. The dinner meeting, attended by thirty-eight Upper Peninsula doctors of medicine and their ladies was held in the Douglass House, Houghton. Official representatives from the MSMS at the rally were W. E. Barstow, M.D., President, L. A. Drolett, M.D., Legislative Committee Chairman and principal speaker, and Mrs. R. S. Breakey, Public Relations Chairman for the Woman's Auxiliary.

From left to right: A. H. Miller, M.D., Councilor, 12th District, Dr. Barstow, W. S. Jones, M.D., Councilor, 13th District, Mrs. Breakey, Dr. Drolett, B. T. Montgomery, M.D., CAP Leader, 12th District, and T. P. Wickliffe, M.D., CAP Leader, 13th District.

"Anish Nabe Nibin" is the new name of Bill Burns, Executive Director of the Michigan State Medical Society. The Indian moniker in English means "Indian Summer" and was tied to Bill by the Ottawa Indians when they made Bill a Chief and member of the tribe at the annual pageant and ceremonies in the Indian Ceremonial Bowl, Harbor Springs, Michigan, July 21, 1950.

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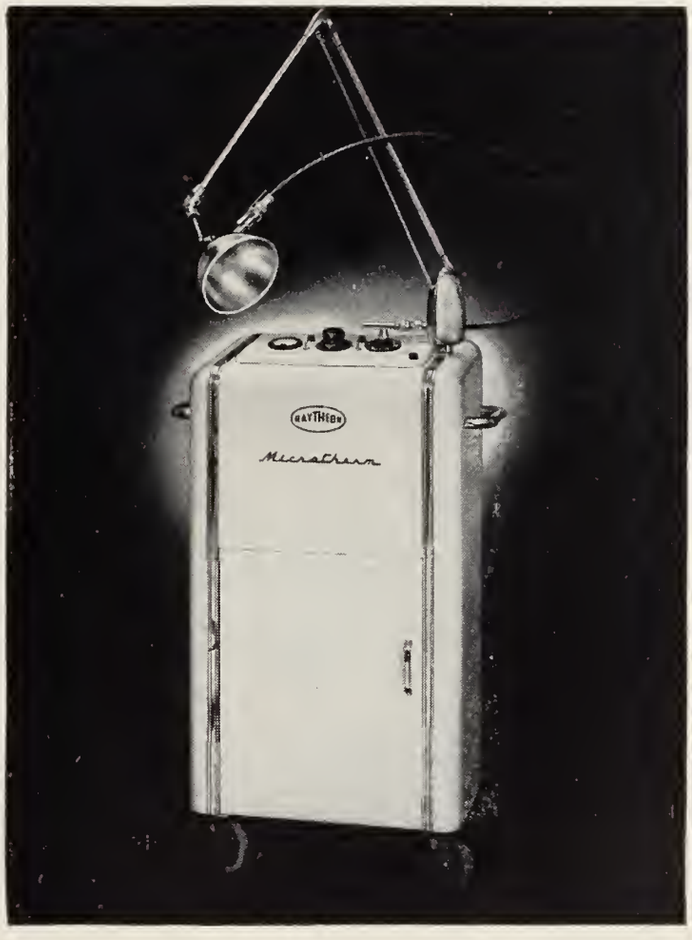

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Management and Treatment of Diseases of the Chest

Report of the Council, American College of Chest Surgeons

Considerable attention has recently been given in the public press to BCG vaccination. From this publicity, the impression might be gained that this procedure alone holds promise of real control of tuberculosis. Since such an impression might postpone indefinitely the establishment and extension of accepted control measures, this statement of the status of vaccination in tuberculosis control programs is issued.

1. Control measures in tuberculosis should be directed at eradication of the disease as a major cause of death or disability.

2. The marked improvement in tuberculosis mortality figures, particularly for the ages under thirty, demonstrates the effectiveness of the present control program.

3. The low rate in children and the continuing high rates in adults over fifty emphasize the location of the problem at the older age levels rather than in children. Under these circumstances, the efficiency of a method of tuberculosis control would be measured by its effect on the mortality from tuberculosis in the older age group, rather than in children.

4. The addition of a vaccine to the present control program requires both careful and adequate consideration. Of the vaccines proposed, BCG has been used most widely and is the one most often discussed.

5. This has been used for more than twenty-five years and recently many millions of people have been vaccinated. However, it must be stated that there is no evidence that meets strict scientific requirements demonstrating that BCG affects the control of tuberculosis, despite the very suggestive results of a few studies.

6. Because of the above fact and because there is no general agreement among investigators anywhere in the world on such fundamental matters as the preparation of vaccine, the method of vaccination, what constitutes a successful vaccination, how resulting immunity may be measured, how long such immunity lasts, et cetera, the procedure would seem to be still in the investigational period.

7. It is therefore recommended that investigation of vaccination in tuberculosis be continued and increased under standard and stringently controlled conditions. This investigation should be designed to determine if the vaccine is indeed effective and what the limitations of its use might be. It would seem desirable that in each country, one agency, preferably the official health agency, should have control of the investigation.

8. Until this has been determined and until these controlled studies are completed, the use of BCG vaccine should be limited to such investigative studies.

9. At the present time the methods which have been proved effective in tuberculosis control should be increasingly applied to all segments of the population, regardless of decreasing mortality figures, so long as tuberculosis remains an important cause of death. These measures include mass x-ray case finding, early diagnosis, rapid institution of treatment, isolation of open cases, and the restoration of the patient to normal life.

MILLIONS OF U. S. MEN HAVE FOUGHT IN WARS

Some 25,030,000 men have served in the armed forces of the United States since the start of the Revolutionary War, according to data compiled by Veterans Administrator Carl R. Gray, Jr.

Of the total, 19,014,000 are alive.

Gray said there are fifteen surviving veterans of the Grand Army of the Republic, and 580 surviving veterans of the Indian wars of the last half of the nineteenth century. He did not list surviving Confederate veterans.

Veterans of the Spanish-American War are dying rapidly, Gray said. Six months ago there were 122,000 Spanish-American War veterans, but as of July 1 there were only 119,000.

The largest group of veterans is the 14,000,000 who served in World War II.

Total battle casualties for all American wars, Gray said, were 935,300.

Gray said the Veterans Administration is legal guardian of 278,000 minor children belonging to 384,800 veterans' widows on VA rolls.

There are 2,308,700 disabled veterans on VA rolls.

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*Fry, C. O.: J. Am. M. Women's A. 4:51 (Feb.) 1949

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Political Medicine

MINISTRY RAPS EYE MEN FOR UNDERESTIMATING

Britain's opticians have had a rap on the knuckles from the Ministry of Health. A Working Party Report said they underestimated the average time for testing each patient by .81 of a minute—in "round figures," 48½ seconds.

The discovery was made after analyzing returns from 200 opticians by twenty-six complicated tables of statistics in the Report.

The opticians estimated that they gave 35.45 minutes to each patient. They were wrong, say the examiners. The time should have been 36.16 minutes.

Further allowances should have been made of .35 of a minute for writing to the doctor about the patient; 1.24 minutes for the filling up of forms; and of .62 of a minute for broken appointments.

Then there was the opticians' nasty habit of overestimating times through reporting them to the nearest five minutes instead of the exact second when they bowed the patient out. The combined result was the .81 of a minute error.

The Report has now to be studied by Mr. Aneurin Bevan, Minister of Health, to decide whether he was right or wrong last May in cutting the opticians' fees from 15s. 6d. to 14s. for 36.16 minutes' work.—*Overseas and Transatlantic Mail,* June 17, 1950.

* * *

FOR SHAME, MR. BEVIN

Consistency is not an apparent attribute of social planners. Mr. Bevin and his cohorts have socialized medicine in Great Britain, and it has been in operation for over two years. Now, when the sacro-sanct body of the head socializer, the man who is running the whole show in England, is himself stricken his scheme is not good enough. Does he have no faith? Does he fear that his doctors and hospitals will take their grudge out on him? Or does he know too much about the service his people are getting, and wants none of it for himself?

The following clipping from the evening papers of Saturday, July 29, 1950 will be especially illuminating. We venture that if America had the same scheme as advocated by the President and Mr. Ewing, and either of these two dignitaries were to require surgical attention, we would find them seeking other than the service available to the public at the Social Security trough.

LONDON—(AP)—Britain's Socialist doctors scolded Foreign Secretary Bevin today for not having his operations under the socialized medicine scheme.

"He is not the only person prominent in the Labor movement who has gone outside the national health service," the Socialist medical association's journal, *Medicine Today and Tomorrow,* complained in an editorial.

Bevin was operated on for hemorrhoids in mid-April in the Manor House hospital. He had a second, similar operation early in June in the London clinic. Neither is a health service hospital.

This meant that he paid directly for his hospital rooms and all other medical costs. Anyone in Britain may have an operation, free medical attention and free hospital service under the Labor government's health scheme by choosing health service hospitals and doctors. Most hospitals and doctors are under the service, but a small minority of Briton's choose to have medical attention on a private basis.

The journal said "there can be neither reason nor excuse" for Bevin's choice of the London clinic, although it noted that "for the Manor House hospital there may be some justification since his union (Transport and General Workers' union of which he was secretary) has always supported that institution."

Neither Bevin nor his aides could be reached for comment.

* * *

DOCTORS READY FOR MASS WALK-OUT

The doctors of Britain have decided to prepare for a mass walk-out from the National Health Service. They are to tell Mr. Aneurin Bevan, Minister of Health, that if their claim for more pay is not met by December a conference will be held to fix a date when members of the B.M.A. will end their contracts with local health committees.

The revolt, which has been threatening for more than a year, followed a four-hour meeting of 250 delegates of local medical committees at B.M.A. headquarters in London. They represent 19,000 doctors—more than 80 per cent of the Health Service strength. And they decided they could wait no longer.

One North of England delegate said some doctors in his area earned much less than £1,000 a year after they had paid for assistant, car, petrol, and phone. The doctors—they met in secret—decided:

1.—To record that never has a general practitioner's pay been agreed.

2.—To tell Mr. Bevan they are "seriously disturbed" by repeated and prolonged delays in negotiations.

3.—To challenge the Minister to say immediately what global sum, in his opinion, should be placed in the central pool from which doctors are paid.

Delegates also decided to co-operate in a proposed Ministry inquiry into doctors' total earnings, including practice expenses, from the Health Service.

They "deplored" Mr. Bevan's failure to give an unqualified assurance that negotiations on remuneration would always be conducted through recognized Civil Service machinery.

Said a B.M.A. spokesman after the meeting: "The doctors feel that their patience is exhausted.

"They are prepared to co-operate in any inquiry. But if some recognition is not forthcoming they will quit the Health Service."

Threats of withdrawal from the National Health Service are contained in motion after motion on the B.M.A.'s agenda for their annual meeting at Southport this month.

—*Overseas and Transatlantic Mail,* July 8, 1950.

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Raising Funds for Arthritis Research

By Henry T. Ewald

Chairman, Michigan Chapter,
Arthritis and Rheumatism Foundation

Detroit, Michigan

I HAVE BEEN requested to write a short article to explain how I, a layman, became interested in arthritis, and why I am heading up the Michigan Chapter of this national organization.

I became interested through Dr. Hugo A. Freund, who is president of the Children's Fund of Michigan, of which I am serving as a director. In the summer of 1948, Dr. Freund, knowing that I had considerable experience in fund raising, asked me to head a fund raising organization in Michigan to put on a campaign in the fall as part of the first drive of the national Arthritis and Rheumatism Foundation which had been recently organized.

At the same time, he asked me to help in organizing a Michigan Chapter as a preliminary to a fund campaign. There were already associated with Dr. Freund in this move, three other men: Dr. Charles J. Smyth, who headed at that time the Wayne County General Hospital, and H. J. McLaurin, both board of directors members of the national organization, and Dr. Earl A. Peterman.

Dr. Freund was extremely interested in research on arthritis, and I understood considerable of his discussion because my son-in-law was a victim of severe arthritis. It seemed incredible to me that nothing close to a cure had been devised for sufferers of arthritis—only means of alleviating pain resulting from arthritis. All of this occurred, of course, before cortisone and ACTH had been discovered.

It seemed to me that if we could get laymen to raise the money, the doctors could start really important researches and studies on arthritis and rheumatism. Anyway, doctors themselves have not proved themselves very effective in raising money. Furthermore, it also seemed to me that the doctors would be more effective in sticking to research, rather than taking time off to raise money. After all, that's their field.

Just three or four months previously there had been organized at Lansing a United Health and Welfare Fund of Michigan, Inc., to raise money for health organizations on a state-wide basis. This was before our Michigan Chapter was organized in the late summer of 1948. I felt we would be in on the ground floor if we joined this new federated organization, that we would raise more money than if we put on our own campaign. I also thought that by joining this first state federated drive in the country, we would also be helping all health organizations.

In the fall of 1948 and the spring of 1949, the first state-wide United Health and Welfare Fund of Michigan, Inc., drive took place in as many counties of Michigan as this organization was able to organize. I was able to help in the organization of the Detroit and Wayne County representative of the United Health. This was a most important unit, because more than half the money to be raised in the state would have to come from Metropolitan Detroit. The drive in Wayne County, particularly, and throughout the state was extremely successful, for a first federated drive. The organization in Detroit was called the United Foundation.

This whole drive was so successful that it was decided in Detroit to combine, in the fall of 1949,

(Continued on Page 1044)

Arthritis Research in Michigan

By James J. Lightbody, M.D.

Detroit, Michigan

THE INTEREST in arthritis in the state of Michigan was greatly stimulated through the establishment of the Michigan Chapter of the Arthritis and Rheumatism Foundation. The field of medical research in arthritis had been greatly overlooked for many years and there was no concerted effort made to raise funds for the development of research into the cause and treatment of arthritis.

The lay members of the Foundation played a very important part in the development of policies in administration of funds, which were raised in the state of Michigan through the very successful efforts of the United Health and Welfare Fund which is a co-operating agency of the Torch Fund in metropolitan Detroit.

Mr. Henry T. Ewald of Campbell-Ewald Co. and Mr. H. J. McLaurin, General Agent for Aetna Insurance Co., Detroit, have taken a major part in the development of the Michigan Chapter of the Arthritis and Rheumatism Foundation. It has been mainly through their efforts and the efforts of other members of the Executive Committee of the Foundation that the program of research in this state has progressed.

The work of the Foundation has been greatly aided also by the Medical Advisory Committee, which is made up entirely of physicians from the state of Michigan. This committee has investigated the various projects submitted to the Foundation for subsidy or assistance. The committee found that there was a marked lack of interest on the part of physicians throughout the state in the general problem of arthritis, and an effort was made through various publicity media to re-establish a healthy interest among the profession relative to the study of local problems in arthritis, and to accelerate new research projects and assist those already in operation.

With the appointment of a medical director in August, 1949, the actual participation of the Foundation in research was begun, and the following projects were assisted all or in part for various periods of operation:

University of Michigan
Children's Fund Laboratory
Harper Hospital
Rheumatic Fever Control Committee
Wayne University

As the news of availability of funds became apparent to others interested in research, applications for grants and fellowships became more numerous, and the Foundation has been able to greatly enlarge the number of projects during this coming year.

The Medical Advisory Committee agreed that the work of the Foundation should be mainly on a clinical level, and that basic problems of research should remain in the realm of the activities of the National Foundation. The National Foundation has its office in New York City and has a very competent medical director—Dr. Gideon K. de-Forest—who is now establishing policies of administration of National funds which are soon to be available for fellowships and basic research.

The Michigan Chapter has assisted the University of Michigan in their studies on the mode of action of cortisone and ACTH particularly on rheumatoid arthritis. Dr. William Robinson, associate professor of medicine, has been head of the Arthritis Clinic at the University Hospital for many years and his reputation in research is well established. Complete metabolic studies are being carried out on arthritics by using the new adrenal hormones during treatment to determine the possible changes that occur following therapy. They are also investigating the changes in joint fluid that occur during hormonal administration.

During the past year the Foundation has greatly assisted Dr. Freund and his associates at the Children's Fund Laboratory in their investigation concerned with the fractional analysis of blood serum by electrophoresis and their studies on viral immunology. This work is also on a clinical level as body fluids of patients with or without arthritis are being studied. They are also investigating enzyme systems in relation to fibrous tissue. Muscle biopsies are being done on cases receiving cortisone to determine changes that may occur in muscle and nerve tissue before, during and after treatment.

The Foundation also approved a grant to Harper Hospital for the study of the new hormones

Dr. Lightbody is Medical Director, Michigan Chapter of the Arthritis and Rheumatism Foundation.

in the treatment of arthritis. Harper Hospital has had a well-developed Arthritis Clinic for many years and much of the material for study was obtained from the Clinic. An Arthritis Research Committee was set up at Harper Hospital to examine and survey each patient admitted to the Research Department for study. During the past year many patients have been admitted for observation and treatment, and much data has been obtained from these patients that will be of great value in the continued program of the arthritis research program. All of the patients have been followed closely, many are now receiving "skip-doses" of hormones, and many have continued in states of remission for various periods of time. Since cortisone and ACTH have become more available to accredited hospitals, the information gained by the Research Committee has been of great help to other members of the staff who had not had any previous experience with these materials. Regular meetings of the Arthritis Research Committee are held and each case is discussed in detail separately.

The Rheumatic Fever Control Committee of the Michigan State Medical Society was supported by the Arthritis and Rheumatism Foundation during last year. The activities of the Rheumatic Fever Control program have centered around the development of diagnostic clinics throughout the state, offering to everyone the privilege of medical consultation. These centers are organized by local county medical societies under the direction of a local committee to provide diagnostic and consultation facilities. Because of the close association of rheumatic fever and other collagen diseases the Foundation felt that active participation in the Rheumatic Fever Control program was indicated.

The only basic research problem that was supported by the Foundation during the past year was a project at Wayne University College of Medicine, to study chondroitinsulfuric acid and its relation to cartilage. Dr. Stanley Levey, instructor in physiological chemistry, was in charge of the project, and satisfactory progress is being made to a point where investigations are being carried out on the enzyme systems responsible for the cleavage of chondroitinsulfuric acid.

The Foundation has approved new projects for investigation at Ford Hospital, Grace Hospital, Providence Hospital, Wayne County General Hospital and Receiving Hospital during the next year. The Ford Hospital project is under the direction of Dr. Dwight Ensign, head of the Department of Arthritis, and he will be assisted by Dr. Frank Sladen, Dr. Gaebler and Dr. McColl. This group will study plasma proteins in rheumatoid arthritis and other joint conditions.

The Detroit Receiving Hospital and Wayne University with Dr. Gordon Myers, professor of medicine, in charge, are to investigate the hormone factors of rheumatoid arthritis and to determine means for prevention of relapse that may follow discontinuation of parenteral ACTH or cortisone. Previous studies have shown that local installation of cortisone causes a striking improvement in certain diseases of the eye, and because of this satisfactory therapeutic result it was felt that cortisone applied locally to involved joints either through the medium of a salve or lotion or by injection may be of some benefit.

The Foundation is to support Wayne County General Hospital in a research problem which will involve a study of functions of the adrenal gland in association with the complete endocrine system. This project is under the direction of Dr. Samuel Jacobson, Medical Director of Wayne County General Hospital. Dr. Jacobson also proposes to test stress reactions in arthritic patients in relation to adrenal function.

At Providence Hospital the research project will be started under the direction of Dr. Earl A. Peterman and Dr. Donald Kaump. This project is to study the effect of cortisone or ACTH on the rate of disappearance of intravenous and intramuscular glucoronic acid and glucosamine in arthritis patients and those without arthritis.

Grace Hospital will take part in the research program of the Foundation, and this project will be under the direction of Dr. Frank Weiser and Mr. Dan Myers. An Arthritis Clinic will be started at this hospital, and the research problem will center around the investigation of the ability of patients to maintain improvement in rheumatoid arthritis initiated by cortisone or ACTH, in combination with gold compounds and antibiotics.

The work of the Michigan Chapter is not only in the field of research, but some of its activities have been centered around the stimulation of interest in arthritis among the lay people of the state. There has been during the past year a greatly increased interest on the part of physicians because of the remarkable therapeutic results obtained with the new hormones. There are, however, many other problems associated with the

treatment of arthritis which could properly and easily be investigated by physicians, particularly in relation to physical therapy, orthopedic surgery and rehabilitation. It is not always necessary to have access to complicated laboratory equipment in order to make careful clinical observation of patients. Any physician or group of physicians interested in some specific project related to arthritis and who feel that they do not have the means to conduct their program, should feel that the Michigan Chapter of the Foundation would be sympathetic in their attitude towards assisting in a financial way.

The people of the state of Michigan have shown by their generous response to the Torch Fund that they want the medical profession to make more than an ordinary effort to treat and possibly prevent arthritic disabilities. It is up to the medical profession of this state to accept this responsibility and renew their interest in this field.

The members of the Executive Committee who have given freely of their valuable time conducting the business of this organization are: Henry T. Ewald, Chairman; H. J. McLaurin, Secretary-Treasurer; Oscar L. Buhr; Sterling Eaton; Dr. Hugo A. Freund; Dr. Roy D. McClure; D. E. Mitchelson; W. A. Moffett; Dr. Earl A. Peterman; Lewis S. Robinson, and Dr. E. C. Vonder Heide.

The Medical Advisory Committee survey applications for research grants and make recommendations to the Executive Committee. The members of this committee are Dr. James J. Lightbody, chairman, Doctors Theodore I. Bauer, Moses Cooperstock, Cecil Corley, Hugo A. Freund, O. H. Gaebler, I. Macy Hoobler, Howard Lewis, John Littig, Kenneth McCleod, Charles W. Peabody, William Robinson and E. C. Vonder Heide.

The Foundation maintains offices in the Basso Building at 7338 Woodward Avenue, Detroit 2, with Mr. W. W. Otto as business manager and Miss Betty Hawke, secretary. Communications may be sent to the medical director at the above address.

RAISING FUNDS FOR ARTHRITIS RESEARCH

(Continued from Page 1041)

both the Community Fund and the United Foundation in one drive, under the name of the Torch Drive. This was the most successful money raising drive in the history of Detroit—in amount of money raised and in percentage over quota.

Naturally, the great success of this venture in federated fund campaigning was successful because it had both capital and labor in agreement.

As a result, we finished the first year of operation of the Michigan Chapter, Arthritis and Rheumatism Foundation, backing up with grants five research projects. For our fiscal year which started May 1, 1950, we are providing approximately double the amount of money for research grants that we provided in our first year of operation.

We are operating on a sound basis from a business standpoint and a sound basis from the standpoint of worth-while research. Requests for grants are scrutinized by our Medical Advisory Committee, composed of fourteen doctors from medical colleges and those private practicing doctors interested in arthritis. These doctors are from all sections of Michigan. Dr. James J. Lightbody, our medical director, heads this committee. As a whole, I think our organization has been most successful. I know it has been the most successful chapter of the entire national Arthritis and Rheumatism Foundation.

MSMS

In the anesthetized patient the vital capacity is reduced by some 15 per cent, with some basal pulmonary atelectasis, in the Trendelenburg, head-down tilt, gallbladder bridge, lithotomy and lateral kidney positions.

* * *

The possible presence of brain tumor should be given consideration in patients with severe hypertension.

MSMS

We as physicians are resolved that the continuation of the marvelous progress in America shall not be thwarted or diverted by the introduction of a foreign ideology which, as in past decades, now elsewhere before our eyes, is destroying the quality of medical care and delaying the correction of obvious faults. We are well aware of the social and humanitarian necessity of provision for the health care of the indigent and the victims of ill fortune whose plight is due to both economic and medical factors. In former days this was accomplished by local communities and more recently by many excellent city and state aid programs, to which physicians already have given personal and professional support. This aid can be supervised best under local administration, and it then can reach the needy without being diluted by the impositions encouraged by socialistic promoters of the welfare state. We already have achieved in this country the best medical care in the world.—Address, AMA President E. E. Irons.

Present Status of ACTH and Cortisone in the Practical Management of Rheumatoid Arthritis

By William D. Robinson, M.D.

Ann Arbor, Michigan

THE ANNOUNCEMENT by Hench, Kendall and associates in April, 1949,[4] that ACTH and cortisone could consistently benefit the clinical manifestations of rheumatoid arthritis has profoundly influenced every patient with any type of rheumatic disease and every physician caring for such patients. While the original report and those of subsequent investigators have emphasized that these agents were primarily research tools, there are few physicians who have not been confronted with the query, "What can cortisone or ACTH do for me?" Since these preparations are becoming more widely available and because of the publicity-generated pressure for their extensive use, a critical appraisal of the results of investigation to date is in order, in an attempt to define what these hormones can do and what they cannot do in the practical treatment of arthritis. This appraisal is made with full realization that many of the conclusions which appear justified at the present time will have to be modified as more information becomes available, and that there are extensive areas where present knowledge is tragically inadequate. Nor should it be construed as minimizing the value of these agents in opening up many new avenues of investigation.

ACTH and Cortisone Are Not Specific for Arthritis

Cortisone (11-dehydro-17-hydroxy-corticosterone) is a member of the group of steroids isolated from the adrenal cortex which are characterized by an oxygen atom in the 11-position of the cyclopentanoperhydrophenanthrene nucleus. A hormone known as Kendall's Compound F (17-hydroxy-corticosterone) which closely resembles cortisone in structure and biological activity is an important physiologic hormone secreted by the normal adrenal cortex. Adrenocorticotropic hormone (ACTH) is a protein derivative, possibly a polypeptide, obtained from the anterior pituitary gland of animals. It has the property of stimulating the adrenal cortex to elaborate and release steroid hormones, including Compound F and possibly some cortisone. While ACTH and cortisone are entirely different chemically, their effects on the patient are similar, as the metabolic and therapeutic action of ACTH is largely due to its stimulation of the patient's adrenal cortex to release cortisone-like steroids. Experience would indicate that 1 mg. of ACTH (Armour's Standard) releases the biologic equivalent of 2 to 3 mg. of cortisone.

The concept that ACTH and cortisone were primarily anti-arthritic agents arose only because arthritis happened to be the first clinical condition in which these hormones were systematically studied. The list of diseases which can be influenced favorably by these agents is already large, and increasing steadily.[6,7] While such conditions as rheumatoid arthritis, rheumatic fever and disseminated lupus erythematosis have some features in common, it is difficult to visualize a common etiology for such diverse clinical entities as ulcerative colitis, allergic states, myasthenia gravis, iritis, and even pneumococcal pneumonia and virus hepatitis. The effect of these agents in diseases of known bacterial or viral origin suggests strongly that they act not on the causative agent, but by modifying the reaction of the host to the causative agent. If this is true, in the use of ACTH and cortisone we are very literally treating the patient rather than treating his disease.

Need for Accurate Diagnosis

Despite the fact that these agents benefit several forms of rheumatic disease, their intelligent use increases the necessity for accurate diagnosis. The pattern and duration of dosage and the objectives of treatment vary from one clinical entity to another; the value of these hormones has been clearly established in some, is uncertain in others, and has not been explored in many.

Under the general heading of rheumatism we find a variety of conditions grouped together only because they may produce similar symptoms.

Dr. Robinson is associate professor of internal medicine, University of Michigan Medical School, in charge of the Rackham Arthritis Research Unit. The Rackham Arthritis Research Unit is supported by a grant from the Horace H. Rackham School of Graduate Studies. These studies were aided by a grant from the Michigan Chapter of the Arthritis and Rheumatism Foundation, and have been assisted by generous gifts of purified pituitary and adrenal hormones and other special preparations from the Upjohn Company, the Armour Laboratories and Merck and Company. We are indebted to Miss Naomi Geib, Miss Phyllis Foster, Miss Lee Hemerline and Mr. Fred Medwedeff for technical assistance in carrying out the many laboratory procedures necessary for these investigations.

Table I presents a working classification, following that adopted by the American Rheumatism Association.

TABLE I. CLASSIFICATION OF RHEUMATIC DISEASES

I. *Arthritis and Arthropathy—Joints Actually Involved*
   1. Specific infectious arthritis—organism known: gonococcal, streptococcal, tuberculous, et cetera
   2. Arthritis of rheumatic fever
   3. Rheumatoid arthritis—Synonyms: atrophic, proliferative, non-specific infectious arthritis
      Clinical variants:
      Still's Disease
      Felty's Syndrome
      Rheumatoid Spondylitis (Marie-Strumpell)
      Associated with psoriasis
      Associated with chronic ulcerative colitis
   4. Osteoarthritis—Synonyms: degenerative joint disease, hypertrophic arthritis.
   5. Arthritis of immediate traumatic origin
   6. Arthritis of gout
   7. Reiter's Disease: urethritis, conjunctivitis and arthritis
   8. Arthritis of neuropathic origin: (Charcot's joints)

II. *Clinical Forms of Non-Articular Rheumatism*
   1. Bursitis—common around shoulder
   2. Periarthritis—common in shoulder
   3. Tenosynovitis
   4. "Shoulder-hand" syndrome
   5. Muscular rheumatism
   6. Fasciitis
   7. Fibrositis

III. *Joint Manifestations Associated with Other Diseases*
   1. Disseminated Lupus Erythematosis
   2. Erythema Nodosum
   3. Periarteritis Nodosa
   4. Hemophilia
   5. Chronic pulmonary osteoarthropathy
   6. Psychoneurosis

In the first group, where the joints proper are affected, the specific infections of the joints have not been studied with ACTH and cortisone. Effective treatment with antibiotics is available for most of these infections. Rheumatic fever is effectively suppressed by these hormones, but the pattern of dosage and objectives of treatment, with special attention to the heart rather than to the joints, modifies their use considerably. By far the greatest experience has been with rheumatoid arthritis, and it is with this disease that this paper is primarily concerned. The value of ACTH and cortisone in osteoarthritis has not been fully established. Acute gout can be effectively suppressed with ACTH, but strangely enough does not appear to respond well to cortisone. The use of ACTH in chronic gout and in interval gout offers interesting possibilities, but much more work is needed to determine its value. Preliminary reports indicate that Reiter's disease responds inconsistently and incompletely to these hormones. Other forms of arthritis have not been studied.

Non-articular rheumatism includes a group of poorly defined clinical entities in which the joints proper are not involved. The value of hormones in this group of conditions has not been defined. In the disseminated vascular diseases cortisone and ACTH have dramatically benefited most patients during the period of administration. In general, larger doses have been needed in these conditions, and the incidence and severity of undesirable reactions has been greater than in patients with rheumatoid arthritis. The extensive visceral pathology in disseminated lupus erythematosis and periarteritis nodosa is also undoubtedly responsible for some of the complications observed during treatment.

Effect of Cortisone and ACTH in Rheumatoid Arthritis

The effects of both ACTH and cortisone on the clinical manifestations of rheumatoid arthritis are dramatic and impressive. This is best seen in patients with active inflammation in the joints, in whom benefit may be apparent in the first twenty-four to forty-eight hours after administration is begun. There is first an improvement in sense of well being and a marked improvement in the patient's ability to use the joints without any convincing objective changes in the joints themselves. This suggests that there must be a much greater element of muscular stiffness in the incapacitation produced by active rheumatoid arthritis than has been previously appreciated. During the next few days there is objective improvement in the joints, with relief of pain at rest, disappearance of tenderness over the joints and of pain on motion. The joint effusions decrease and disappear. Objective improvement in the joint findings is usually apparent at the end of the first week of treatment. In some patients an increase in muscle strength occurs, the appetite usually improves rapidly, and the patients experience a sense of well being which occasionally may amount to a definite euphoria. Anemia, if present, is usually improved and the sedimentation rate as a rule shows a definite return toward and may reach normal levels at the end of ten days to two weeks. However, it should be emphasized that even in patients responding in the above fashion, the disease is not completely obliterated. In the original report by Dr. Hench and associates, "arthritis in miniature" is described as persisting in spite of continued administration of these materials.

Not all patients with rheumatoid arthritis show the degree of improvement described above. In patients whose disease has been of many years duration and who show relatively little evidence of active inflammation, the response is frequently slower and may require larger dosage before a definite response is seen. Patients with extensive

cartilage damage, with severe muscle contractures, or with deformities due to previous joint damage without continued activity of the inflammatory arthritic process, will respond more slowly, incompletely, or not at all.

In the clinical variants of rheumatoid arthritis which have been studied, the same general pattern has been observed. Rheumatoid spondylitis in the active stage is remarkably improved; advanced cases with ankylosis and calcification of paraspinal ligaments show little objective benefit, although pain may be alleviated and constitutional manifestations relieved. The joints in psoriatic arthritis are usually improved, although higher dosage levels may be required than in rheumatoid arthritis; effects on the skin lesions have been less consistent. Juvenile rheumatoid arthritis usually responds well and appears to require a dosage quite similar to that needed to induce remissions in adults. Other variants have not been studied sufficiently to justify any conclusions.

The greatest handicap in using these agents in the practical management of arthritis is the temporary nature of the benefit obtained. When these hormones are discontinued, signs and symptoms may begin to reappear within twenty-four to forty-eight hours. In a great majority of patients, there is rapid reappearance of muscular stiffness, and the clinical manifestations in the joints tend to reappear in the same order as they disappeared when treatment was instituted. The degree of relapse varies. In some patients the remission of signs and symptoms of the disease obtained through the use of cortisone and ACTH may persist as long as several weeks. In a few cases, remissions for several months have been reported. However, in most patients, within a few days to a few weeks after the hormones are discontinued, the patient's clinical condition is essentially the same as it was prior to treatment.

The following dosage schedule for use of cortisone in adults with rheumatoid arthritis has been recommended: 100 mg. every eight hours for three doses on the first day, 100 mg. every twelve hours for the second day, and then 100 mg. every twenty-four hours as a maintenance dose for the next one to three weeks until maximum clinical improvement has been obtained. Then 100 mg. is given every forty-eight hours for an additional two to four weeks. In some patients it may be necessary to increase the dosage in order to elicit the desired response. If the expected improvement is not obtained within four or five days after beginning treatment, the dosage is then increased to 100 mg. every twelve hours for two to four days and then reduced to 100 mg. daily. While this dosage pattern will apparently be satisfactory in a great majority of the patients, we have observed some patients in whom improvement could not be maintained on doses of less than 200 mg. daily. A significant percentage of patients will relapse at the time that the 100 mg. dose is extended to the every forty-eight hour schedule. In the use of cortisone it must be appreciated that the preparation available is in the form of a suspension which is slowly absorbed from the intramuscular deposits, and that the metabolic effects following a short course of cortisone therapy may persist for as long as ten to fourteen days.[9] The effects of dosage reduction usually cannot be evaluated in less than three to five days following a change in dosage.

The therapeutically effective dose of ACTH also varies widely. As a general principle it appears best to start the patient on 10 to 12 mg. (Armour's Standard) given every six hours, so that the total dose is 40 to 50 mg. per day. The patient is kept on this dose for several days to ascertain whether the therapeutic effect is being obtained. If no effect is noted after several days the dose should be increased to 15 mg. every six hours, and finally, if no improvement is noted after several days on this schedule, the dose should be increased to 20 mg. every six hours to a total of 80 mg. a day. Most patients respond to one of the above dosage schedules. ACTH appears to be rapidly destroyed in the body and the adrenal cortical hormones resulting from ACTH stimulation are metabolized rapidly. The clinical and physiologic effects of a given dose of ACTH are likely to be worn off in about six hours. If the maximal clinical effect from the smallest daily dose is desired, this daily dose should be divided into four injections six hours apart. The possibility of prolonging the action of ACTH is being investigated, and it seems likely that preparations having activity for at least twenty-four hours will be available in the future.[12]

After a full clinical and laboratory remission is obtained, the dosage of ACTH should be decreased to find the minimal dose effective in maintaining the remission. In general, the six hour dosage schedule should be maintained until each individual injection is of the order of 5 to 10 mg. per injection. The next daily dosage decrease may be accomplished by giving at eight hour intervals

the same individual dose that was used in the six hour schedule. If this is successful, the injections may be spaced at twelve hour intervals. In some patients maintenance has been obtained on a single injection every twenty-four hours.

The dosage of both cortisone and ACTH in children does not appear to be proportional to body size, age, or surface area.[1] The required dosage to induce a remission is about the same as needed in adults, and appears to vary with the severity of the disease process rather than with any other single factor. Certain manifestations of hyperadrenalism, particularly those resembling the manifestations of Cushing's disease, seem to occur somewhat more readily in children than in adults.

The very important question of how long either of these agents should be administered in a single course cannot be answered satisfactorily on the basis of present information. In patients who are well controlled on small doses without manifestations of hyperadrenalism, it seems reasonable that treatment can be given over a longer period of time than in those who require larger doses, or in those patients in whom undesirable effects become manifest. The recommendation that a course of treatment with these materials should not exceed six weeks appears to be reasonable from the point of view of avoiding undesirable effects, although it very definitely may not be the best schedule with respect to obtaining the maximum effect on the rheumatoid arthritis. From the practical point of view, the expense of these preparations will limit the duration of treatment in most patients to a relatively short period of time. Since in the great majority of patients relatively little permanent benefit can be expected from a single short period of administration, this economic factor should be taken into consideration before treatment is instituted. After a rest period, when either of these hormones is re-administered, prompt remission again occurs.

Both clinical experience and laboratory studies indicate that it is undesirable to discontinue either of these hormones suddenly. This is particularly true when large doses of ACTH, in the neighborhood of 100 mg. a day, have been given. Withdrawal of these hormones should be preceded by a tapering off process accomplished either by increasing the interval between injections or decreasing the dosage per injection.

Another therapeutic problem for which no definite rules can be laid down is the patient whose disease cannot be controlled except on high doses, where manifestations of hyperadrenalism almost uniformly appear. At the present time, such patients should probably not be considered candidates for hormone therapy unless clinical and laboratory facilities permit the patient to be followed very closely.

There is extensive investigation under way in an attempt to find some adjuvant method of treatment which may prolong the beneficial effects of ACTH and cortisone after these hormones are withdrawn. As yet, however, no satisfactory combination with other therapeutic agents has been reported.

Mode of Action is Unknown

There is convincing information that in rheumatoid arthritis and other rheumatic diseases there is no evident deficiency of adrenal cortical secretion. Tests of adrenocortical function do not show any consistent derangements in these patients. The minimum dose of cortisone required to effect a remission in arthritis is about 100 mg. daily, whereas 25 mg. of cortisone daily appears adequate to maintain the patient with Addison's disease in good health. Detailed studies indicate that the metabolic responses to ACTH of patients with arthritis do not differ significantly, in the qualitative sense, from those of normal individuals. Possibilities of quantitative differences, or of imbalances, in adrenocortical function require further investigation.

The multiple metabolic changes induced by these hormones have been studied carefully by several groups of investigators during the administration and withdrawal of ACTH and cortisone.[1,3,9,11] None of the manifold changes in the physiology and chemistry of the body can be correlated with the clinical improvement seen when these agents are given, or with the recurrence of disease activity when they are withdrawn. It can definitely be stated that the anti-rheumatic activity does not correlate with eosinophile depression, or with other change in the blood picture, with changes in protein, carbohydrate, uric acid or electrolyte metabolism, with the blood ascorbic level, or with changes in various enzyme systems which have been measured in the blood.

Experimental studies indicate that both ACTH and cortisone can definitely influence the development of connective tissue, the outstanding feature being an inhibition of fibroblastic development.[8] Biopsies of affected joints before and dur-

ing hormone treatment have shown a marked decrease in the inflammatory process and in the formation of granulation tissue, but not complete reversion to normal tissue structure.[1,5] Examination of the joint fluid during the first few days of hormone treatment has shown a striking reduction of the number of inflammatory cells and a suggestive improvement in quality of mucin.[1,3,10] That cortisone has a direct action on the joint tissues is strongly suggested by the fact that these changes in joint fluid can be obtained by injecting cortisone directly into the affected joint. However, the manner in which this effect is obtained remains a mystery.

Results of investigation to date can be summarized by the statement that it appears unlikely that these agents are correcting the fundamental cause of the arthritis, but that they are suppressing the manifestations, quite possibly at the connective tissue level. Such a concept is in accord with both clinical experience and anatomic investigations.

Undesirable Effects Are Physiologic, Not Toxic

While studies of the metabolic effects of the hormones have failed to give significant clues as to their mode of action, they have definitely established that the undesirable effects which may limit the clinical application of these agents are in many respects due to induced hyperadrenalism. Therefore, an understanding of the metabolic effects of these hormones is essential if they are to be used intelligently in practical treatment. While the question of which steroids are normally secreted by the adrenal cortex and the relative proportions of each secreted has not been definitely settled, the biologic effects of the adrenal cortical hormones is usually divided into three main groups: the adrenal androgens, the C-11 oxygenated steroids, and the desoxycorticosterone-like group.

Adrenal Androgens.—The activity of this group of steroids is responsible for the masculinizing effects, the hirsutism, and the amenorrhea which may be seen, particularly in female patients. They are probably also responsible for some of the acniform lesions. These manifestations may develop during the administration of either ACTH or of cortisone. Other manifestations which resemble those frequently seen in Cushing's disease, such as rounding of the face and development of striae, can occur with either preparation. These changes are reversible with decrease in dosage or with discontinuance of the hormones, even though they may have been present for several months. In general, the dosage should be kept as low as possible consistent with the therapeutic effect to circumvent these manifestations, especially in women and children.

11-oxysteroid Effects.—This group of steroids profoundly affects the handling of organic materials and their effect is primarily catabolic. They are responsible for the negative nitrogen balance, the impaired ability to utilize glucose, the mobilization of fat from fat depots and of amino acids from tissue protein and cause an increased excretion of nitrogen, amino acids, phosphates and calcium in the urine. This group is also responsible for the changes in circulating cellular elements of the blood, particularly the decrease in circulating eosinophils and in lymphocytes, which are frequently used as an index of adrenal corticoid activity.

Fortunately, there are balancing mechanisms that may come into operation to prevent excessive metabolic shifts. The increased food consumption which usually occurs when these hormones are given, if the diet is not restricted because of metabolic studies, may compensate for some of these catabolic effects. Significant depression of carbohydrate utilization with the production of a diabetes-like picture has not occurred frequently at the dosage level used in the treatment of rheumatoid arthritis, but this possibility must be kept in mind. Patients with pre-existing diabetes will require larger doses of insulin during the administration of these hormones.[2] There are two practical points in connection with detection of disturbances of carbohydrate metabolism with these hormones. First, glycosuria does not necessarily mean hyperglycemia, as ACTH particularly can lower the renal threshhold for glucose and lead to renal glycosuria. Secondly, post-prandial hyperglycemia usually develops before there are marked changes in the fasting blood sugar.

Desoxycorticosterone-like Effects.— This group of steroids causes retention of sodium and chloride with concomitant retention of water and increase in weight. They also cause an increased excretion of potassium, with some degree of metabolic alkalosis. Again, however, there appear to be compensating mechanisms which come into operation in a majority of patients with continued adminis-

tration of these materials, so that serious difficulty is not regularly encountered. The electrolyte changes and changes in body weight observed during ACTH administration, which illustrate some simplest method of guarding against the undesirable effect of sodium and chloride retention is an accurate record of body weight. Blood chemistry determinations and electrocardiograms may

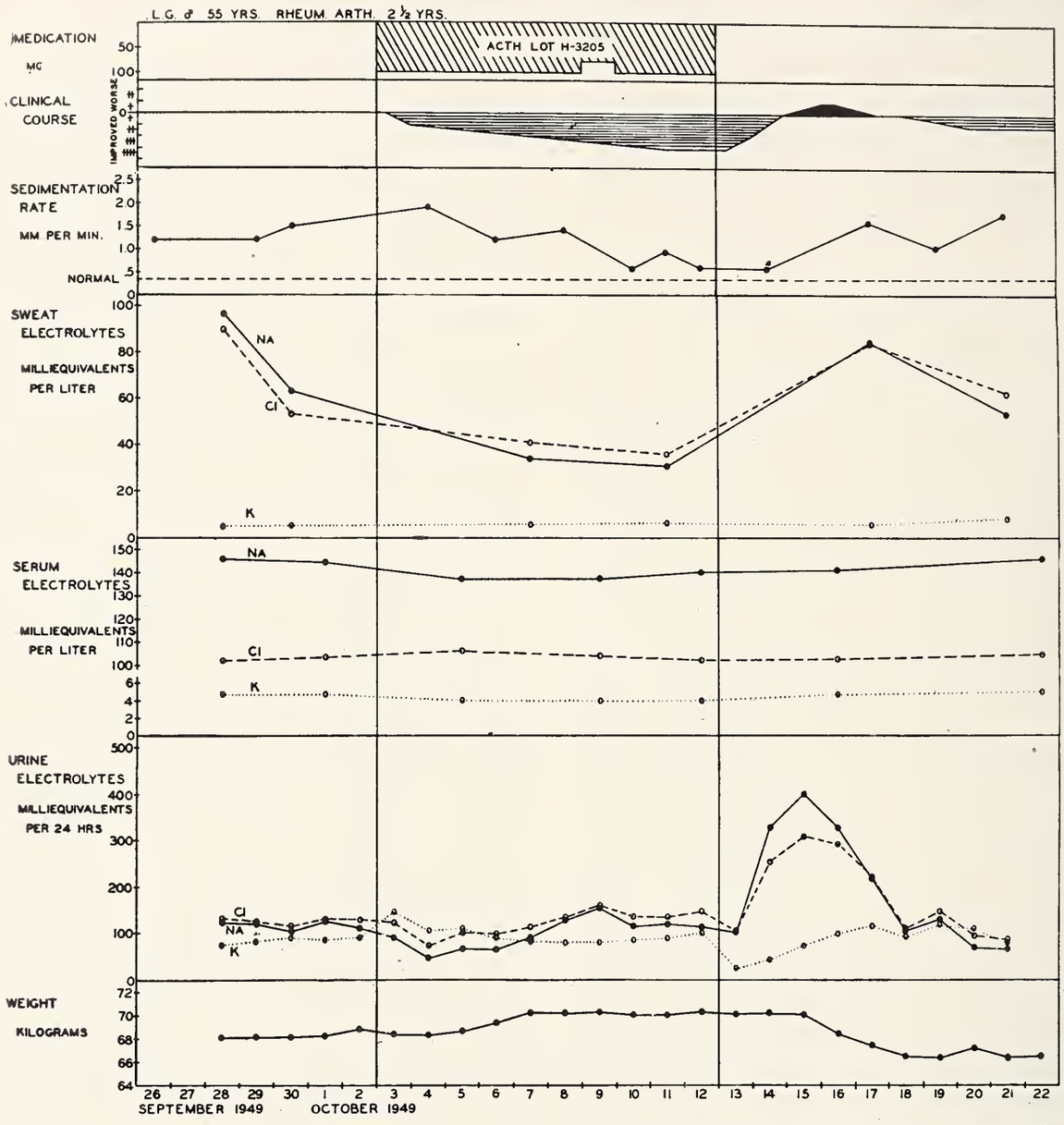

Fig. 1. Effects on clinical status, sedimentation rate, and electrolyte metabolism during ten days of ACTH administration, 100 mg. per day. Patient was on a constant diet containing 4.6 gm. of sodium and 4.8 gm. of potassium throughout study. From Robinson, Conn, Louis, Johnson and Duff.[9]

aspects of this compensation are shown in Figure 1. It is these physiologic effects on electrolytes, which underlie the development of edema and the decrease in blood potassium levels which may occur during the administration of ACTH and cortisone.

The sodium retention can lead to sufficient increase in blood volume to cause elevation of blood pressure or pulmonary edema. Depletion of tissue potassium may precede a decrease in serum potassium levels and can lead to clinically significant muscle weakness and cardiac dysfunction. The be needed to detect decreased blood potassium levels. This effect on electrolytes can be minimized by putting the patient on a low salt diet and by the administration of potassium chlorides; occasionally diuretics may be useful. As illustrated in Figure 1, prompt diuresis follows discontinuation of these hormones.

There are certain untoward effects which are not as well understood, but which probably represent manifestations of hyperadrenalism, as they are seen in some cases of Cushing's disease. Among these are the psychic derangements which have

been produced occasionally, particularly with large doses and with the use of these materials over long periods of time. Although the usual psychic reaction to ACTH and cortisone is an increased sense of well being, definite psychotic states including mania, depression and schizoid disturbances have been produced. The type of psychic disturbance appears to depend on the pre-existing personality pattern of the individual. Until more is known about these manifestations, it would seem wise to use these hormones with caution in patients with unstable personality patterns and to avoid their use in patients with previous history of psychosis. Premonitory symptoms of significant psychic derangement include marked swings of mood, severe insomnia, bad dreams and increased psychomotor activity.

The effect of these agents in suppressing fibroblastic perforation raises the possibility of their inhibiting reparative processes in general, including wound healing. Such an effect has been definitely demonstrated in experimental animals and appears to be related to the dosage of the hormones used. Whether the dosage levels used in the treatment of rheumatoid arthritis significantly interfere with the reparative processes remains to be determined. The importance of this effect with respect to diseases which usually heal by the laying down of fibrous tissue, such as tuberculosis, also has been inadequately explored. The general effect of the adrenal steroids in suppressing inflammatory processes also raises the possibility that during administration of these hormones an intercurrent infection may be masked.

Experimental studies have demonstrated definite evidence of depression of the activity of the patient's own adrenal cortex for a period of a few days after ACTH is stopped, and for as long as two to four weeks after cortisone is discontinued. The practical importance of this observation is that the patient may respond to the stress of an intercurrent illness or surgery during this period in the same manner as a patient with Addison's disease. This effect can apparently be minimized by the tapering off program of dosage at the termination of treatment rather than abrupt withdrawal. There has been no evidence of permanent suppression of adrenocortical activity in patients who have received ACTH and cortisone for periods of several months.

Contraindications

An understanding of the physiologic effects of these materials serves to indicate in what conditions the administration of ACTH or cortisone would be an added hazard. Because the effect on electrolytes is mediated through the kidneys, patients with serious impairment of renal function would present special problems. Patients with hypertension and congestive cardiac failure also might be expected to have added difficulty with electrolyte changes. Increased difficulty in the control of patients with diabetes mellitus can be anticipated. To this list should also be added patients with evidence of excessive adrenal function, hirsutism, and known psychotics and psychopathic personalities. It is apparent that the contraindications are relative and that the use of these materials in patients with the above conditions depends on the relative severity of the complicating conditions and of the rheumatic disease. The additional hazard of the use of cortisone and ACTH in such patients should be recognized and prepared for.

Cortisone and ACTH Cannot Be Considered Complete Treatment

From the above discussion it is apparent that these hormones cannot be considered a specific cure for rheumatoid arthritis. It would be indeed unfortunate if, in the enthusiasm for the use of these hormones, the principles of established value in the management of these patients should be neglected. The treatment of rheumatoid arthritis must be highly individualized and adapted to the general condition of the patient as well as to the characteristics of the joint involvement. Measures of established value in the treatment of this disease include the use of rest, of measures to relieve pain, the proper utilization of physical therapy adapted to the individual patient's needs, and the application of orthopedic principles in the prevention of deformities. In addition, there must be careful attention directed to detection and correction of any abnormalities which may be having a deleterious influence on the patient's general health. These in particular have to be individualized and applied only as they are indicated in the particular patient. Some common conditions that fall under this heading include attention to the nutritional state of the patient, correction of anemia, and elimination of focal infection.

Particularly in case of long duration where

severe deformities may be present, it must be emphasized that a sound rehabilitation program involves a great deal more than use of these hormones for a few weeks. The possibility that these agents offer in conjunction with the use of physical medicine and with orthopedic correction of deformities is just beginning to be explored.

Summary

Present information indicates that ACTH and cortisone cannot be considered as cures for any form of arthritis. Their effects in several types of rheumatic disease is unknown. In rheumatoid arthritis they are dramatically successful in suppressing the inflammatory joint manifestations and in improving the patient's sense of well being during the time that they are administered. The degree of improvement is less marked in patients with extensive deformities due to previous joint damage who show relatively little active arthritis. The dosage of both ACTH and cortisone must be adjusted according to the response of the individual patient, with the objective of using the smallest dose effective in maintaining a clinical remission and at the same time avoiding manifestations of hyperadrenalism.

With a few exceptions, the clinical condition of the patient is essentially the same as prior to treatment within a few days to a few weeks after these agents are discontinued. An unpredictable and small percentage can be expected to remain in remission after the use of ACTH or cortisone for a few weeks. Their use over longer periods of time involves many problems which cannot be answered satisfactorily on the basis of present knowledge.

Both cortisone and ACTH are potent hormonal substances which are capable of profoundly influencing many important processes of body chemistry and physiology. Most, if not all, of the undesirable effects of these agents which may interfere with their therapeutic use can be attributed to such hormonal effects. An understanding of the more recent knowledge of pituitary adrenocortical physiology will permit the physician to anticipate and guard against the undesirable effects which may complicate the use of these hormones.

Despite intensive research efforts, the mode of action of these hormones in rheumatic diseases has not been established. Present information indicates that they suppress rather than eradicate the clinical and pathological manifestations of the disease. On both theoretical and practical grounds, cortisone and ACTH cannot be considered the final answer in the management of rheumatoid arthritis. The potentialities which these agents offer to the patient suffering from rheumatoid arthritis must not lead to neglect of other less dramatic but established methods of proven value in the treatment of this disease.

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The perfect personality is one in which all the psychological elements are taken account of and exploited. Nothing in such a personality is suppressed, or rather (since an element of the mind can no more be suppressed than an organ of the body) nothing is relegated to a lower sphere or pushed into the darkness of unconsciousness. Instinctive tendencies, which if they were allowed to exist in independence would be socially undesirable and disruptive of the personality, are harnessed, so to speak, and made to spend their energy in forwarding the co-ordinated activities of the whole spirit. The intermittences of the mind and its capacity for irrelevance are admitted; but these defects are made to provide their own remedy. The man who would co-ordinate his personality must devise a technique for association-making. Only in this way can he compel the powers, or rather the weaknesses, that make for mental discontinuity to work in the cause of a deliberately chosen continuity.—Aldous Huxley.

(Contributed by Mental Hygiene Committee)

Cortisone and ACTH -- Their Present Relationship to Rheumatoid Arthritis

By Frank J. Sladen, M.D.

Detroit, Michigan

THE WIDE range of experimental application of cortisone and ACTH, some of it brilliantly successful, and the occurrence of certain undesirable effects in the dosage required for like success in rheumatoid arthritis have raised many stimulating questions for consideration.

The justification of this somewhat editorial presentation is the value of provoking more general recognition and discussion of these questions about this common and distressing form of joint trouble beyond the present relatively small group who are especially concerned with the special field of rheumatoid arthritis. Of no little significance, too, is the enormous responsibility being placed now upon the medical profession to see that these powerful substances are properly handled. In this age when agents of the greatest danger to man are put in his hands, the sense of danger must not lessen but rather strengthen the determination to contribute something safe and sound to the welfare of mankind.

The expectations of the scientific world were raised to a high pitch with the announcement in April, 1949, by Hench, Kendall, Slocumb and Polley[4] of the miraculous "Effect of a Hormone of the Adrenal Cortex (17-hydroxy-11-dehydrocorticosterone: Compound E) and of Pituitary Adrenocorticotropic Hormone on Rheumatoid Arthritis."

The reaction to the dramatic nature of this announcement, particularly amongst the medical profession, was tempered by three factors which were emphasized in the original article by these authors. The first was the scarcity of Compound E or cortisone obtainable from desoxycholic acid of bile by thirty-eight chemical procedures, difficult steps which in the end yielded only minute amounts of the substance. The second was the statement by Hench and his associates that these agents provided new means of study and exploratory, experimental work but should not, in the knowledge at the time, be considered therapeutic agents. Third was the warning of the occurrence of certain undesirable effects which were difficult to avoid if large enough doses were given to obtain the desired state of remission and to maintain it for any length of time.

With characteristic ingenuity the excitement was soon resolved into great activity in many fields: the chemists to develop more practical methods of producing cortisone and in amounts to meet the demand; the pharmaceutical houses to find new sources of supply and get into production; the rheumatologists to better understand the possibilities with problems in their field of rheumatic diseases; and the research men and laboratories in general to know what actually did go on under the influence of these powerful hormones in the physiology and chemistry of the human organism.

In the midst of this, one laboratory was able to provide in fair amounts the adrenal cortical tropic hormone (ACTH) of the anterior pituitary gland under the influence of which a responsive adrenal cortex is stimulated to secretory activity. From this source* qualified workers were supplied with ACTH in quantities sufficient to permit exploration of its effects in a wide range of diseases and conditions. It must be acknowledged with due appreciation that this resource enabled the widespread attack upon the problem in this relatively short period of time. For after only fifteen months much is known about the results of the application of these two hormones.

Reports of the results of these varied projects have been summarized from time to time by Hench,[5,13] Thorn[16] and others. They can be said to influence "the metabolism of many, if not all, tissues of the body"[12] some favorably, some otherwise. They affect the host in his reactions to certain disease states, by initiating a reversal toward normal of those reactions of the host to the disease. However, they do so only as long as these agents are continued. In rheumatoid arthritis, at any rate, the disease is in a state of remission, potentially latent, to relapse as soon as the hormonal therapy is discontinued. The original causal factors of the disease have apparently not been altered by the period of heavy hormone dosage.

The hope that a state of remission might be maintained permanently has remained alive only because some cases have not relapsed at once with this alarming rapidity on discontinuing the hormone. This infrequent incidence of persisting re-

*Armour & Company, through Dr. John Mote, Medical Director.

mission after discontinuing cortisone or ACTH has not as yet been defined as representative of a special group of cases with some different characteristic that may be recognized as a favorable factor. The cases included in the first report of Hench and associates have been under treatment presumably not more than eighteen months, which then is the present time limitation on any case receiving cortisone or ACTH. Therefore, even in relation to the infrequent case in which absence of evidences of activity persists after discontinuing the hormone, unfortunately we must bear in mind the ordinarily remitting and relapsing character of the course of rheumatoid arthritis, at least until the mechanism of the production of the disease is understood. Until this occurs, and it seems possible it will follow in turn, no satisfactory rationalization fulfills every requirement. However, it is probable that therapeutic plans will soon be soundly defined and then the maintenance of the remission will become equally possible.

Tribute must be paid to Dr. E. C. Kendall who with H. L. Mason and C. S. Myers isolated Compound E from beef adrenals and published the work in 1936, the year that T. Reichstein published the same findings in a Swiss chemical journal and Wintersteiner and Pfiffner, Americans, did the same thing in the *Journal of Biochemistry*.

No one can afford to miss the downright pleasure of reading Dr. Hench's story[5] of the "studies which led to our use of these hormones." His persistent efforts to find the answer to the beneficial effect of jaundice and of pregnancy upon the course of rheumatoid arthritis provide an inspiring and stimulating incentive to scientific investigation.

However, there is a long roll of research workers who should be mentioned as preparing the way for what might be considered the opening of the door in great part to a new day in medicine. For example, Dr. Herbert M. Evans and his coworkers at the University of California produced specific endocrine effects from anterior hypophysial hormones in 1922 and succeeded in separating the pituitary growth-promoting hormone in 1939. He and Dr. Choh Hao Li purified it in 1944. The fact that Dr. Evans produced permanent diabetes by prolonged administration of anterior pituitary extracts in 1932 should give background to the warnings today about those undesirable effects. Dr. Evans and Dr. Li were the first to purify anterior hypophysis adrenocorticotropic hormone in 1942. This work in his sixtieth year has made possible the recognized volume of research work with this available hormone in the face of the scarcity of cortisone. Such a contribution merits full recognition.

It behooves one here to seem to digress by pointing out the prevailing opportunities for confusion in recording and reporting studies of patients with rheumatoid arthritis. It is even difficult at times for two doctors really to understand each other in conversation about such cases.

It is this condition of affairs that led the American Rheumatism Association to adopt a "Classification of Diseases of the Joints and Related Structures" and later the so-called "Therapeutic Criteria in Rheumatoid Arthritis."[15] Unfortunately a classification of diseases even when put into use cannot force a uniform terminology upon anyone. The four grades of response to treatment (complete remission, major improvement, minor improvement and unsatisfactory result) as expressed in many different aspects (systemic signs, joint inflammation, extraarticular activity, joint mobility, erythrocyte sedimentation rate, articular enlargement or deformity and x-ray signs), these have meaning only as they are well known to everyone and in daily application. It must be emphasized, too, that all clinicians seem to feel able to treat rheumatoid arthritis but a relatively small number comprise the membership of the American Rheumatism Association.

As these criteria are really created for the exactions of reports of trials of therapeutic substances, they are not ordinarily in conversational usage. If they could be uniformly used, much of the confusion would disappear. The most serious handicap to better evaluation of the reported results of many observers is the lack of classification of the cases, of an effort to separate the cases into groups which would permit right and proper deductions. For many years, reports have appeared characterizing the results of a therapeutic agent or reporting the success of a program for various numbers of "cases of rheumatoid arthritis."

There are great differences in the possibilities of response to therapy and in the likelihood of remissions, spontaneous or provoked, in people of the different age groups, with different emotional reactions, personalities, family and environmental situations, and different factors of nutrition, body mechanics, chronic infection and other variables in the constitutional background, which may play a part in influencing results. The individuality of

each case is expressed further by home habits and work; customary diet, digestion, elimination; weight, posture, habits of rest and exercise; experiences with infection, acute and chronic, past and present; and even heredity. Even though corrective programs are designed to control these in some uniform way, it is difficult to eliminate what has been established by years of habit.

More important, however, when the course and evidences of the disease are the index, or in the thought of today, the evidences of the reaction of the host to the disease, is the conviction that (1) the stage of disease, (2) the degree of activity, and (3) the condition of the patient as already stated, are of paramount importance.

The "early" case is quite distinctive, with typical fusiform interphalangeal joints, effusion and soft tissue changes only, and nothing abnormal in the x-rays. Remissions occur spontaneously and under therapy in a higher percentage than in later stages. In addition, the individual has lost little in general condition.

In contrast the "established" case has definite x-ray changes, loss in general condition, a chronically and continuously active process in varying degrees and remission much more a rarity.

There should be no question of the need of specifying those in the "advanced" stage in a group by themselves. For here one deals with an invalid, limited in physical activity by degrees of joint destruction and loss of musculature and tone, anemic, with the disease occasionally actively progressive, usually in a low sluggish state of activity, with little if any periods of relief.

With some plan for defining the stage of the disease, preferably for uniformity, the classification of functional impairment of the American Rheumatism Association, further clarity will be aided materially by an attempt to estimate the activity of the disease.

The term remission in medicine originally was used to express a temporary or incomplete subsidence of pain or fever and other signs and symptoms, usually in an infectious disease. A remittent fever, as expressed twenty-five years ago, fell toward normal in the morning to rise again at night, as in the course of typhoid fever. It did not mean defervescence necessarily. Recovery and remission are two different terms and not synonymous.

Gradually the word remission has come to mean subsidence of symptoms and signs in the course of a chronic disease such as brucellosis, for instance. As long as the possibility of relapse remains current, within such a length of time as to be reasonably connected, recovery is not tenable. The American Rheumatism Association has been rightfully exacting about complete remission. Any return of rheumatoid activity as evidenced clinically, by x-ray, or in any other sign of progression of the disease is classed as "unsatisfactory" and therefore not a complete remission.

The emphatic point is that the goal of therapy in rheumatoid arthritis is remission, the production of a state of remission.

Activity and degree of activity in this connection becomes a condition of considerable importance and usefulness to evaluate.

The obvious signs of activity are found first in the local joints (acute or chronic swelling with heat and pain, and particularly the appearance of newly inflamed joints, or the progressive increase in the process in any joint); second, in the general condition of the patient (fever, malaise, easy fatigue, loss of well-being); third, in the serum protein changes (rise in erythrocyte sedimentation rate, rise in serum globulin and reversal of the serum albumin-globulin ratio); and, fourth, in the x-rays (evidence of progressive loss of joint space and other signs of destruction).

Remissions occur in the natural course of this disease and seem to be possible at any stage, although obviously more difficult to attain as the disease progresses. The temptation is to credit the therapeutic effort of the moment.

A recent example is a man, thirty-five years old, who in the fifth year of the disease is so crippled in feet, knees, hips, hands and shoulders that he cannot get about. Four weeks of a rest program with upbuilding efforts as a preface to cortisone resulted in a drop in fever to normal accompanied by a change in the ESR from 38 to a low normal level. There were no acutely inflamed joints. Transfusions had corrected a severe anemia.

However, the crippled and deformed joints still confined him to limited and painful physical efforts. We have seen similar cases in which the active process has seemed to have burned out.

The confusion to the patient as to what is going on is a matter of subjective feelings and to be expected. He may even be expected to find it hard to believe there is improvement when it is explained to him.

Salicylates were considered an activity-stopping agent in rheumatoid arthritis as they are in rheu-

matic fever. Febrile reactions from artificial sources were in the same category. The occurrence of remission has been as high as 37 per cent in early cases reported in 1948[11] and 31 per cent of 245 cases in 1942.[2] Recently[1] eighty-three cases treated in their first year by conventional methods but without gold showed a remission figure of 24.1 per cent. In the same one-year group, 106 cases treated with gold showed a remission of 66 per cent. Gold salts seem here to have definitely increased the success of the effort to obtain remissions.

This brings to mind the attitude not uncommonly encountered today, that all treatment of rheumatoid arthritis now centers in cortisone or ACTH. Most emphatically the conventional methods of treatment, prescribed rest and exercise, dietary corrections, salicylates, gold, physical therapy, transfusions, orthopedic measures and the like should be continued. In fact those who have had the benefit of these measures have tolerated hormonal therapy better, and for them the therapy has seemed to be more successful. Whether these methods have any relationship to the physiological production of Cortisone or ACTH is now a matter of study.

Relapses are always to be expected and efforts must be maintained to thwart them if possible. Ragan and Tyson[9] in a three-year study of 143 cases reported in 1946 an over-all occurrence of relapse in 75 per cent of the cases. The length of time a case is followed is significant in this figure.

Such is the state of affairs as we enter the next period, one of great hope because of cortisone and ACTH. Holbrook and Hill feel that these agents will be superseded by better, safer and cheaper methods developed through the experimental work with these hormones. Hench emphasized in June of this year[6] that the use of these hormones is still an investigative procedure, not a treatment. Conn[7] believes that if these substances are to be used by clinicians should it be by men who know their dangers and regard them as experimental tools.

Fifteen months have elapsed since Hench's announcement and during this short time an extraordinary amount of research work has been done.

Our questions deal only with rheumatoid arthritis in relation to this work. The door was said to have been opened to a new level of understanding of the mechanism of disease. It must be confessed the cause of this progressive disease remains in obscurity.

There is no evidence that it lies in the field of hormones or is related to any secretory insufficiency of the adrenal cortex.

The effect of cortisone upon allergic states is striking. Harvey[3] has demonstrated this effect of clearing and of preventing the appearance of allergic reactions, even anaphylactic shock, in a series of controlled experiments. Cortisone, similarly, causes reversal of the signs and symptoms of rheumatoid arthritis and prevents their reappearance as long as it is continued. Much is lacking, however, in this picture from the several characteristics of allergic conditions as they are known at present.

Should further proof support the suggestion that the symptoms and signs of rheumatoid arthritis are on an allergic basis, the etiological agent might soon be revealed.

If rheumatoid arthritis is of the nature of an allergic disease because of the reaction to cortisone, then the same thing may be said of the very wide range of conditions influenced in the same way by cortisone. Such a contention is not completely out of the range of possibility, inasmuch as allergy provides a mechanism accounting for symptoms and tissue changes that have long been shown to be reversible.

With Cortisone, the production of a state of remission, which is the real objective of treatment, is attained quickly and regularly in accordance with dosage and tolerance.

Other therapeutic agents, in the experience of many, have accomplished the same results. So-called spontaneous remissions occur in the early stages as a characteristic of the course of rheumatoid arthritis. But no other remissions have been so sure and dramatic and rapid or with the same percentage of incidence as those which follow Cortisone or ACTH.

The process has been studied carefully by Hench and his associates and the study has been exhaustingly repeated by numerous other observers. The remissions in the ordinary course of the disease and those precipitated by gold therapy and those which are cortisone-produced share the same characteristics.

This brings up the question as to whether the spontaneous remission in the course of the disease is due to the secretion of Cortisone or Cortisone-like bodies produced as the result of certain influences which have led to the stimulation of the anterior pituitary gland or directly to the adrenal cortex. Is this equally true of the remissions ap-

parently precipitated by gold therapy?

There is no available evidence that these hormones are or even can be produced physiologically in such large amounts as are given experimentally. The smaller increments of dosage possible within the physiology of the body may account for the slower and less dramatic changes in these pictures of improvement as well as for the greater difficulty of accomplishing the more complete reversal of symptoms and other evidences of the disease. With smaller experimental doses of cortisone the same struggle for a remission is repeated though sometimes successful.[10]

With the release of cortisone to qualified hospitals its more common use as an experimental therapeutic agent will follow. However dangerous this may be, one must admit that there are certain critical states where it has outstanding usefulness, such as tiding the patient through a crisis, a result which will save his life and permit other therapies to be applied. An asthmatic crisis is an example of this. Its proper use in certain inflammatory eye conditions[8,14] which ordinarily have caused blindness has saved the patient's sight.

Therapy in rheumatoid arthritis to be most successful must produce a remission in the first year of the disease. Otherwise joint changes are likely to occur which cannot be reversed and will therefore persist in some degree as a residual. This must be realized. Bone destruction and joint derangements cannot be repaired by these hormones.

Therapy in the first twelve months, to repeat, produces the highest percentage of remissions and the most complete return to normalcy, without residuals. Treatment in the first six months is better still. In the annual meetings of June, 1950, great hope was expressed that safe therapeutic plans with these hormones, with adverse effects in control, will be the accomplishment of the near future, now that a fair part of the experimental exploration of the field has been carried out. Prevention, the greatest desideratum, may have to wait for the discovery of the etiology of the rheumatoid arthritis, but the very nature of the changes provoked by these hormones in the host brings the thought that prevention can be considered as nearly at hand as successful therapy.

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*The difference in spelling is as published and is found elsewhere in the literature.—*tropic*, L. a turning, a combining form used to denote changing, tendency to change, especially in a (specified) manner or in response to a stimulus.

—*trophic*, Greek trephein, to nourish, a combining form denoting nutrition, nourishment.

Crew, F. A. E., and Wiener, B. F.: The existence of a fourth hormone, thyreotropic in nature, of the anterior pituitary. Brit. M. J., 1:777, 1930.

Evans, H. M., Simpson, M. E., and Austin, P. R.: The hypophyseal substance giving increased gonadotropic effects when combined with prolan. J. Exper. Med., 57:897, 1933.

Crew, Professor of Genetics at University of Edinburgh, was one of the first to use the expression. The earliest appearance of the expression in the publications of Evans was in this article in which it is used synonymously with gonad-stimulating. The spelling—trophic was not used by those who pioneered in the hormone field. It was probably introduced in very recent years.

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DEMOCRATS PROMOTE HEALTH PROGRAM

The Democratic national committee went to bat again for the Truman administration's national health insurance program.

In a 32-page booklet distributed to party workers, the committee called it a "balanced program," and denied it is "Socialized medicine" as some opponents have charged. The committee said the plan provides for:

More medical education, medical research, hospitals and health centers, local public health work, health protection for babies and children, and application of the "insurance principle to spread the cost of medical care and keep unexpected illness from becoming a financial disaster to millions of Americans."

The booklet says the patient would be free to choose his own doctor, the doctor would be free to accept or reject new patients, and the program would be locally administered. It also says:

A worker could budget his medical insurance by paying 1.5 per cent of earnings under $400 a month. No worker would pay more than $6 a month. Self-employed persons could be covered, paying slightly more.

"It is paying for medical care on the principle of insurance on the installment plan," the booklet adds.—*Battle Creek Evening News*, May 19,1950.

ACTH and Colchicine in the Clinical Treatment of Acute Gouty Arthritis

Physiological Considerations and Review of Therapeutic Results in Fifty-one Attacks

By William Q. Wolfson, M.D., H. Dunham Hunt, M.D., Clarence Cohn, M.D., William D. Robinson, M.D., and Ivan F. Duff, M.D.

IN SUITABLE dosage, ACTH will end almost all gout attacks within twenty-four hours; its employment for this purpose is a most useful clinical application of this versatile hormone. The small amount of hormone needed makes the cost of treatment relatively small and insures freedom from overdosage effects. The essential feature permitting successful application of ACTH for this purpose is the ability of colchicine prophylaxis to prevent the return of gout attacks when ACTH is withdrawn.[1,2,5,17] The recent development of a well-tolerated long-acting ACTH preparation[20] promises an even more efficient therapy. Twelve of the first thirteen gout attacks treated with this preparation were successfully terminated with a single 100 mg. hormone injection, and the thirteenth attack was ended by the second 100 mg. dose.

Pathological Physiology

Recent studies have indicated acute gouty arthritis to be a well-defined acute and complex endocrine disorder of intermediate metabolism in which both hereditary and acquired disturbances appear important. Space permits only a brief didactic review of the conclusions derived from recent investigations.[3,6,7,15,16,18]

A characteristic endocrine disturbance in the patient with clinical gout is his failure to restore promptly a normal adrenal cortical status when a state of lack of adrenal glycocorticoids ("corticoid-lack") is induced by the withdrawal of exogenous ACTH, by a decrease in the rate of secretion of endogenous ACTH, or by an increase in the rate at which the peripheral tissues are utilizing adrenal glycocorticoids. In normal subjects, the occurrence of a state of corticoid-lack soon activates the hypothalamo-hypophysial mechanism which controls the rate at which the pituitary secretes ACTH. Thus, in the normal, corticoid-lack fairly promptly evokes the secretion of increased amounts of ACTH which stimulate the adrenal cortex to increase its output of steroid hormones and thus to correct the corticoid-lack. In gout patients, this response to corticoid-lack is either absent or sluggish, apparently because of a defective response in the hypothalamo-hypophysial mechanism. In some gout patients, more severe impairment of the hypothalamo-hypophysial mechanism results in chronic undersecretion of ACTH with resultant impairment in the ability of the adrenal cortex to respond normally unless stimulated for a time with large amounts of exogenous ACTH. Because of the significant frequency in the gouty of initial adrenal cortical unresponsiveness to stimulation, unusually large initial doses of ACTH are essential for optimal therapeutic results in acute gouty arthritis.

A second endocrine disturbance appearing essential in the pathogenesis of clinical gout consists of the secretion of an abnormal male sex hormone, probably from the adrenal cortex, and which appears to control the appearance of genetic hyperuricemia, an inherited biochemical lesion closely related to susceptibility to clinical gout. By the conjoint operation of these two endocrine disturbances, in some as yet unknown manner, acute gouty arthritis appears to be an endocrine deficiency disorder, produced by the occurrence of an abnormally persistent state of corticoid-lack in an individual who is predisposed by a particular type of hereditary endocrine disturbance to develop the particular symptomatology of gout. Even though the gout attack may be a severe stress, it regularly fails to induce significant increase in the rate at which the patient's pituitary secretes ACTH (Table I).

Recognition of acute gouty arthritis as a deficiency disorder, the immediate cause of which is persistent corticoid-lack, explains the dramatic relief produced by ACTH. Correction of an actual deficiency of ACTH is an hypothesis not yet estab-

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lished in most other diseases which respond to ACTH. That relief of acute gouty arthritis by ACTH is actually due to the increased secretion of adrenal corticoids is shown by experiments in which large doses of aqueous adrenal extract or of Lipo-Adrenal Cortex, Upjohn, were successfully used to end gout attacks. An unexplained observation is the failure of cortisone in doses as large as 300 mg. intramuscularly[11] or 200 mg. intravenously in propylene glycol[14]* to provide relief which approaches that regularly obtained with 100 mg. of ACTH. Nevertheless, these doses of ACTH and cortisone produce roughly similar effects in rheumatoid arthritis and many other diseases. This observation indicates that the state of initial unresponsiveness of the adrenal cortex, a fairly frequent finding in the gouty, cannot be bypassed by using economical doses of cortisone, but must be overcome by prompt use of large initial doses of ACTH.

TABLE I. THE ABSENCE OF EOSINOPENIA DURING ACUTE GOUTY ARTHRITIS, WITH A GOOD DROP IN EOSINOPHILS AFTER ACTH IS ADMINISTERED, SHOWS THE REGULAR FAILURE OF THE GOUTY HYPOTHALAMO-PITUITARY SYSTEM TO RESPOND TO STRESS BY THE SECRETION OF INCREASED AMOUNTS OF ACTH FROM THE PITUITARY

No attempt has been made in this table to distinguish patients receiving aqueous ACTH or long-acting preparations. Eosinophil counts were determined by Randolph's method, and were done four hours after doses of aqueous ACTH or Adactar, and twenty-four hours after doses of Polyvinyl-Adactar. Because of the high sensitivity of the eosinophil response to ACTH, other indices of adrenal response are more suitable for showing the frequency with which the initial response to ACTH is subnormal in the gouty.

Similar data showing the failure of acute gouty arthritis to induce eosinopenia may be found in the report by Gutman and Yu, (2). The median eosinophil count in 6 interval gout patients was 128. In 8 patients with acute gouty arthritis, the median count before administration of ACTH was 236, decreasing to an average minimum of 15 during administration of 100 mg./day of ACTH. The smaller eosinophil decreases seen in the present series are presumably due to the fact that the responses shown are those measured after the first dose of ACTH given and before the adrenal cortex was stimulated to maximum responsiveness.

Patient	Interval Gout		Acute Gouty Arthritis		Acute Gouty Arthritis, After ACTH		
	Number of dtrs.	Average count	Number of dtrs.	Average count	Number of dtrs.	Average count	Average dose of ACTH given
M.Ku.	3	250	4	320	3	125	42
R.Si.	1	131	1	163	1	6	50
M.Pf.	.	...	2	154	3	91	42
P.Pu.	.	...	5	187	5	150	50
P.Po.	3	161	1	395	1	33	50
S.Be.	1	194	2	143	4	46	45
P.Do.	3	216	2	220	2	46	50
S.Ca.	.	...	1	228	1	60	50
C.Kr.	2	185	2	185	2	94	50
S.Ma.	2	133	2	140	1	27	100
G.Jo.	.	...	1	36	1	5	50
E.St.	3	49	1	90	1	19	25
L.Ho.	.	...	1	91	.	..	..
L.Li.	1	100	1	50	1	6	50
H.Ro.	1	654	1	1053	1	18	100
R.Mc.	1	56	1	138	1	19	50
M.Ge.	2	129	2	112	2	17	75
P.Ko.	.	...	1	226	1	0	100
W.Fu.	.	...	1	232	2	25	100
R.Cr.	.	...	1	90	1	39	100
W.Ho.	.	...	1	152	1	62	100
R.Pe.	.	...	2	268	2	47	100
R.Wi.	.	...	1	56	1	46	100
J.Ha.	.	...	1	47	2	2	100
Median Values:	23	147	38	153	40	33	69 (Aver.)

When a gout attack has been terminated with ACTH and the hormone is withdrawn, to some extent there is restoration of the conditions which originally precipitated the attack. Hence, in some patients, the attack may reappear within a very few days. This tendency for recurrence upon withdrawal of ACTH makes its use alone an incomplete form of treatment for acute gouty arthritis. Fortunately, if colchicine is given simultaneously, ACTH may be withdrawn after the attack has been controlled without the reappearance of acute gouty arthritis.

It has been suggested that the prophylactic and

*See Table II, attack R.P.2.

therapeutic effect of colchicine in gout might be due to release of ACTH from the patient's pituitary. Recent studies[7,16] have shown that while therapeutic doses of colchicine do occasionally appear to release some ACTH, the amounts are small, the effect is transitory, and the time of release may not coincide with the time at which clinical relief appears. An astute clinical observer might well have guessed the outcome of these studies, for, if colchicine actually were able to release large extra amounts of ACTH from the human pituitary, it would long since have become an important agent in the treatment of rheumatic fever, rheumatoid arthritis, and a host of other diseases. One must conclude that the mechanism by which colchicine relieves gout, and the reason for its specific action, still remain entirely unknown. The important practical advantage of combined ACTH-colchicine treatment over the use of ACTH alone points to the importance of studying analogous combinations of incompletely effective specific agents with ACTH or cortisone in other disease syndromes.

ACTH Preparations Used in Treatment

The three preparations of ACTH used in our studies included: (1) Aqueous ACTH, Armour, a material now generally available in hospitals. A number of reports have confirmed the ability of aqueous ACTH to suppress acute gouty arthritis.[1-3,5-7,10-12,15-17] (2) An early long-acting preparation of ACTH adsorbed on colloidal aluminum phosphate[19] was given according to the same dosage schedule as that used with aqueous ACTH. (3) A recently introduced long-acting ACTH preparation, Polyvinyl-Adactar (aluminum phosphate-adsorbed adrenocorticotropin, Armour, in polyvinyl-pyrrolidone[20]) was given according to a special dose schedule. The results with this preparation will be discussed separately.

Dosage Schedule and Therapeutic Results with Aqueous ACTH

Patients treated with aqueous ACTH or the early long-acting ACTH preparation received an initial 50 mg. dose which was repeated at six-hour intervals until definite (75 per cent) or maximal (90 per cent) improvement in articular symptoms was observed. Colchicine (Lilly) was begun at the same time as ACTH in a dosage of .00065 gm. (1/100 grain) four times daily. When ACTH was stopped, colchicine was continued until the first gastrointestinal symptoms of intolerance (ordinarily, diarrhea) were noted. Colchicine was then discontinued for at least twenty-four hours, or until the diarrhea had ended. Symptomatic treatment for diarrhea was given, if indicated. After termination of the diarrhea, treatment was resumed with .00065 mg. of colchicine three times daily. If gastrointestinal symptoms recurred on this dosage, colchicine was again withdrawn for twenty-four hours and resumed at a dosage level of .00065 mg. twice daily. In this way, the maximum daily dose of colchicine which was well tolerated could be ascertained. Once this was determined, it was continued daily until all residual joint soreness had disappeared and for at least two weeks thereafter.

The small total dosage of ACTH needed in the treatment of acute gouty arthritis makes it unnecessary to carry out elaborate laboratory studies to detect possible electrolyte disturbances associated with adrenal hyperfunction. It has been convenient, and is important for the general management of gout patients, to study the response of the patient's adrenal to ACTH at the time of an acute gout attack. Estimation of the eosinophil count before ACTH is given and four hours after each dose, together with determination of the urine urate/creatinine ratio in one-hour urine samples before the first dose and during the fourth hour after each dose, provides a good check on the adrenal's response.[13] If the urine urate/creatinine ratio is to be observed, care should be taken not to give patients salicylates, cincophen, carinamide or other agents increasing urate clearance for at least seventy-two hours before beginning treatment. Our data suggest that a good therapeutic response in gouty arthritis is not obtained until ACTH evokes a good increase in adrenal function. The second important and practical use of such data is a guide to management of gout patients in certain medical and surgical emergencies, discussed below.

The general pattern of an ACTH-induced remission in acute gouty arthritis is quite regular. Little change in joint symptoms is generally experienced for the first two or three hours after the initial 50 mg. dose of ACTH. In those who respond best, pain then usually begins to subside and the recession of discomfort is frequently so rapid that the patient comments with surprise on his minute-to-minute improvement. Those patients who require more than one dose of ACTH may show one of two varieties of response. The first or the second dose may fail to produce any notice-

able change in symptoms, but the succeeding dose may be accompanied by the same type of rapid improvement described above. In others, however, there is a more gradual recession of symptoms

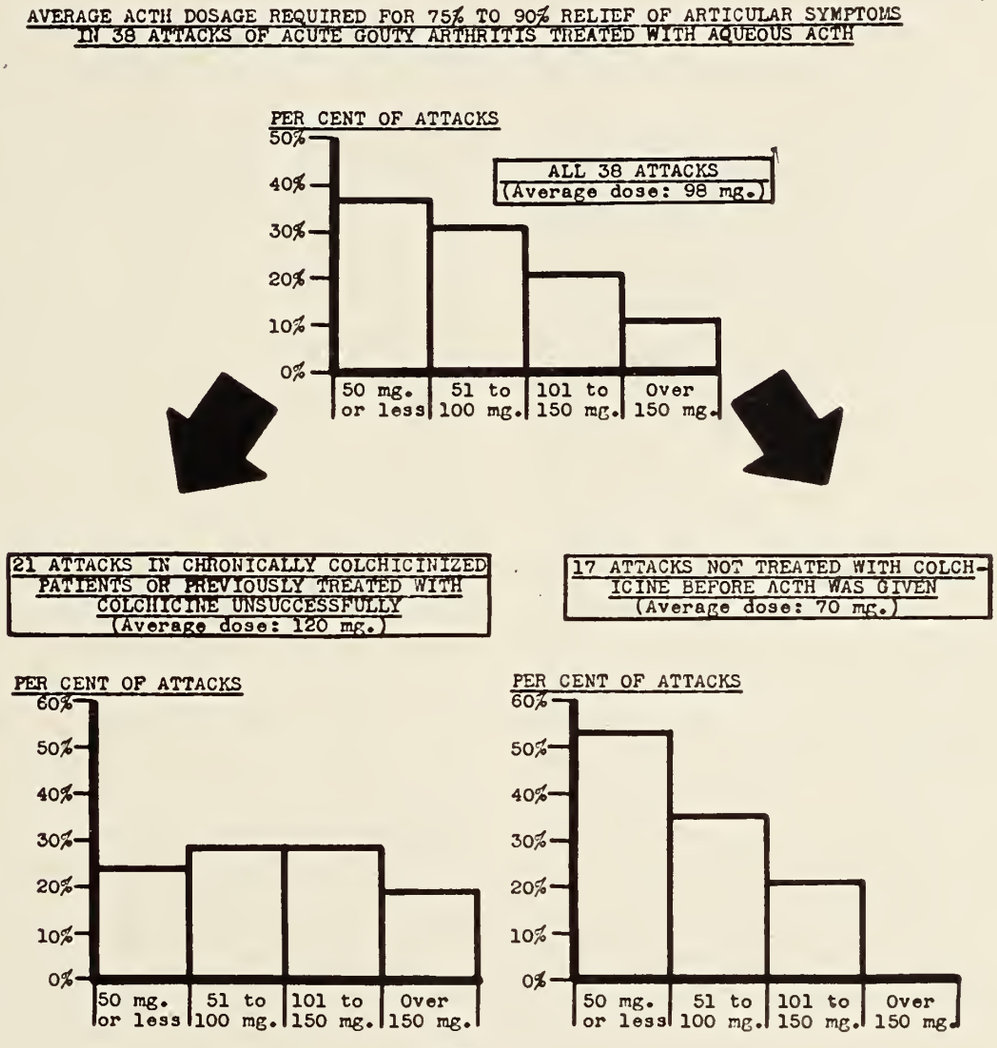

Fig. 1.

frequently accompanied by a marked irritable "touchiness," hypersensitivity, tenseness, and depression. Wood Jones[4] has pointed out that it is the combination of this mood with the severe pain of gouty arthritis which makes patients intensely apprehensive of their attacks. Although Wood Jones and many earlier clinicians believed this abnormal mood to be precipitated by the pain of the attack, careful questioning of patients and of their families has indicated general agreement that in many instances the mood disturbance actually appears well before the onset of the attack. Observation of the mood shift has, in fact, occasionally permitted accurate prediction of an imminent attack by patients, by members of patients' families, or by ourselves. Following adequate doses of ACTH, this mood disturbance is rapidly dissipated and replaced by the characteristic extroverted joviality of interval gout. Improvement in mood may precede, accompany, or occur somewhat later than the period of rapid improvement in joint symptoms. For many patients, relief from an oppressive men-

with increasing improvement following each successive dose. With the exception of an attack treated very soon after the onset, some slight soreness or feeling of tenseness in the previously involved joint generally remains, even when maximal improvement has been attained and palpatory tenderness has been reduced to Grade 1 or less. Often this abnormal feeling takes the form of the "wooden toe" sensation described by Wood Jones.[4] These abnormal sensations show no further notable improvement if more ACTH is given and generally are not sufficiently troublesome to keep patients from walking considerable distances. Patients may report the disappearance of pain from joints which had not been recognized as involved during the attack.

Rapid changes in emotional state have been particularly interesting. Acute gouty arthritis is fre-

tal disturbance appears as important as does the actual decrease in articular pain. The fact that this abnormal mental state precedes the onset of articular symptoms would suggest that it is directly correlated with the state of corticoid-lack which incites acute gouty arthritis.

Figure 1 summarizes the amount of ACTH used in terminating thirty-eight attacks of acute gouty arthritis treated with aqueous ACTH or the early long-acting preparation according to the schedule given above. It is clear that the response obtained in "colchicine-resistant" attacks, defined in the legend, is less rapid than in attacks not previously treated with colchicine. This suggests that the more severe attacks resist termination with colchicine. The average colchicine-resistant attack required 120 mg. of ACTH, while in patients who had not previously received colchicine the average attack was ended with 70 mg. These results are considerably superior to those obtained in a number of patients by Gutman and Yü,[2] who used a dose schedule in which ACTH was given at half the rate prescribed in our dose schedule; that is, 25 mg. every six hours. Results similar to ours have been obtained by Margolis and Caplan,[5] using our dosage schedule. It would appear, therefore, for reasons mentioned earlier, that the use of high initial doses is essential in obtaining the best results in the treatment of acute gouty arthritis. Figure 1 shows that the administration of 50 mg. doses of ACTH every 6 hours will generally permit 75 to 90 per cent improvement to be obtained within twenty-four hours. That colchicine plays no part in this immediate improvement is indicated by the fact that only 2.0 milligrams of colchicine, a sub-therapeutic amount, is received by patients during the first 24 hours.

Dosage Schedule and Therapeutic Results with the Long-acting ACTH Preparation, Polyvinyl-Adactar

Patients treated with Polyvinyl-Adactar were given an initial dose of 100 mg., which was repeated at twenty-four-hour intervals until 75 to 90 per cent improvement was noted. Colchicine was begun simultaneously with ACTH and given according to the same dosage schedule as when used with aqueous ACTH. Adrenal cortical functional responses were evaluated from hematological and chemical studies performed immediately before the first dose and at twenty-four-hour intervals thereafter. The duration of activity of Polyvinyl-Adactar extends to forty-eight hours following a single dose. The preparation produces an intense continuous adrenal cortical stimulation at a high level for at least the first twenty-four hours after administration.[20]

Table II summarizes the therapeutic results obtained with Polyvinyl-Adactar in thirteen attacks treated according to the above schedule. This group included eight colchicine-resistant attacks occurring in chronically colchicinized patients, or which had previously been treated unsuccessfully with full doses of colchicine. Five attacks occurred in patients not previously colchicinized. All of the five attacks in the uncolchicinized patients, and all but one of the eight colchicine-resistant attacks were successfully terminated by a single 100 mg. injection of Polyvinyl-Adactar. The remaining attack was ended by two 100 mg. injections of Polyvinyl-Adactar. In the previously uncolchicinized patients, an average of nine hours was required to obtain 75 per cent or greater relief of articular symptoms, while in the colchicine-resistant attacks, an average of thirteen hours was required for the same degree of improvement. Eleven of the thirteen attacks treated, in fact, showed 75 per cent improvement by the end of twelve hours after the first dose had been given. Of particular interest is the fact that this group includes a patient (P.P.) in whom an excellent clinical response was obtained, although previous studies in this patient revealed a marked degree of initial adrenal cortical unresponsiveness to ACTH.[16] In these earlier studies an initial 50 mg. dose of aqueous ACTH and 25 mg. of an early long-acting preparation given on each of four successive days had resulted in no significant increase in adrenal cortical function.

The results obtained with Polyvinyl-Adactar in acute gouty arthritis appear to exceed in speed and effectiveness even the previous excellent results obtained with aqueous ACTH. Since Polyvinyl-Adactar in conjunction with colchicine has enabled the treatment of over 90 per cent of the attacks studied with a single injection, the use of this technique appears to closely approach ideal therapy.

Prophylactic and Emergency Use of ACTH in Patients with Gout

Emergency situations normally evoke from the pituitary an increased secretion of ACTH which leads to an increased secretion of glycocorticoids

TABLE II. EFFECT OF 100 MG. DOSES OF A LONG-ACTING ACTH PREPARATION, POLYVINYL-ADACTAR, IN THIRTEEN ATTACKS OF ACUTE GOUTY ARTHRITIS.

Unless otherwise noted, each patient received a 100 mg. dose of Polyvinyl-Adactar (aluminum phosphate adsorbed ACTH, Armour, in polyvinyl-pyrrolidone) at Hour 0. Colchicine was begun at a dose level of .00065 gm. q.i.d. concurrently with the hormone and continued according to the schedule given in the text.

Patient	Grade of Attack	Dosage PVAD	Serum Urate		Blood Count 24 Hours After Polyvinyl-Adactar		Clinical Results
			Hour 0 Mg. %	Hour 24 Mg. %	Eosinophils Per cent of Initial Value	Granulocytes Per cent of Initial Value	
Attacks in Colchicinized Patients or Previously Treated Unsuccessfully with Colchicine							
H.R.	3-4	100	7.8*	5.8*	2%	218%	Beginning improvement in 6 hours. 75% relief in 24 hours, 90% in 48 hours. 90% in 48 hours. Slight reactivation from hour 66 to 78, which terminated spontaneously.
P.P.	2	100	8.0*	6.9*	0%	188%	Beginning improvement in 4½ hours; 75% relief in 12 hours, 90% in 24 hours with ability to walk 20 blocks without marked discomfort.
S.B.	2-3	100	....	....	3%	385%	75% relief in 6 hours, 90% in 12 hours, 100% in 24 hours.
M.M.†	2	100	....	....	20%	182%	75% relief in 6 hours, 100% in 12 hours.
P.K.	2	100	....	....	0%	251%	75% relief in 12 hours, 100% in 24 hours.
W.F.	2-3	100	....	....	21%	248%	Bare 75% relief in 24 hours. Second 100 mg. of PVAD given at hour 24.
		x 2			0%#	170%#	100% relief 24 hours after second dose.
W.H.	2-3	100	6.5	5.0	41%	117%	75% relief in 6 hours, 100% in 12 hours, with ability to walk ⅓ mile without discomfort.
R.P.1	3	100	6.8	5.7	2%	143%	Beginning improvement in 4 hours. 75% relief in 12 hours, 100% in 24 hours. (See also attack R.P.2 below).
Attacks Not Previously Treated with Colchicine							
O.T.	3	100	....	....	....	....	75% relief in 12 hours, 100% in 14 hours.
M.J.	1-2	100	....	....	....	....	75% relief in 8 hours, 100% in 16 hours.
R.C.	2-3	100	7.4*	5.4*	57%	185%	Beginning improvement in 2 hours. 75% relief in 12 hours, 90% in 24 hours.
R.P.2	3	100	9.1	9.0	23%	221%	Following the attack designated R.P.1, colchicine was discontinued shortly after recovery. Soon thereafter, hemorrhoidectomy was performed. Attack R.P.2 began on the 4th p.o. day. Following PVAD, there was beginning relief in 3 hours, 75% in 9 hours, 100% in 12 hours. In an attack of similar severity occurring 5 weeks after R.P.2, intravenous administration of 200 mg. of cortisone in propylene glycol produced only insignificant improvement.
R.W.	2-3	100	8.6	7.6	82%	131%	75% relief in 5 hours, 100% in 10 hours. Maintenance colchicine was continued after termination of the attack, and no new attack was precipitated by a fracture of the tibial malleolus which occurred two weeks later.
Median Clinical and Laboratory Responses							
Average Polyvinyl-Adactar Dosage Required to End Attack:							108 mg.
Average Time Required for 75% Relief of Symptoms:							11 hours (S.D. = ± 6 hours)
Median Decrease in Serum Urate, 24 Hours after 100 mg. of PVAD:							1.5 mg.%. (16% of initial value)
Median Decrease in Eosinophils, 24 Hours after 100 mg. of PVAD: (per cent of initial value)							88%**
Median Increase in Granulocytes, 24 Hours after 100 mg. of PVAD: (per cent of initial value)							103%**

†Patient M.M. received Adactar-Neutrogel (Aluminum phosphate adsorbed ACTH, Armour, in 18% neutralized non-antigenic gelatin). The physiological characteristics of this preparation closely resemble those of Polyvinyl-Adactar (20).
#Values 24 hours after the second injection of 100 mg. of Polyvinyl-Adactar.
*Starred serum urate values were estimated by an indirect silver precipitation method which gives results approximately those of uricase methods, and which average 85% to 90% of values given by conventional direct colorimetric urate methods.
**Although it is convenient to study hematological responses at a 24 hour interval after PVAD, this is not the opitmal time for detecting the maximal hematological response, which occurs at 16 to 18 hours after a single injection. Particularly with smaller doses of this material, the hematological response 24 hours after injection may be very considerably less than the response 16 to 18 hours after injection.

by the adrenal cortex. The nonspecific resistance of the body to acute stress of many kinds appears to depend very importantly upon this mechanism activated by the corticoid-lack or release of adrenalin produced by the emergency situation. In the gout patient, as we have indicated, there exists a fundamental impairment of the mechanism for the response to corticoid-lack (Table I); the response to adrenalin is ordinarily similarly inefficient.[16] Normally, this defect may result in nothing more serious than an uncomfortable gout attack; but, in emergencies, it may become the critical factor governing the patient's survival. Major surgery or acute vascular accidents appear to be the most common events in the life of a gout patient likely to test the hormonal mechanism for combating stress effects. The frequency of fatal acute myocardial infarction in the gouty is well recognized. This is probably responsible for the belief that they are unusually susceptible to premature development of arteriosclerotic cardiovascular disease, even though the truth may be that gout patients respond less adequately to the stress of an infarct than do the non-gouty. The frequency of postoperative attacks of acute gouty arthritis is sufficiently typical to be regarded by Hench as an important diagnostic sign and is an indication that the gouty often fail to respond optimally to the stress of surgical operations.

It is our present belief that active support of adrenal cortical function should be considered for any gout patient faced with major surgery or incurring an acute vascular accident. We suggest that a gout patient should not be subjected to

elective major surgery until it has been determined that his adrenal cortex is normally responsive to ACTH; and, if this cannot be demonstrated, that operation be deferred until the adrenal cortex has been stimulated to normal responsiveness with ACTH. It appears advisable to determine the eosinophil count four hours after conclusion of an operation. Eosinophil counts are also advisable in any gout patient who has had an acute vascular accident. If, in these situations, the eosinophil count is not below 25/cu.mm., it is presumed that the pituitary-adrenal system has not responded optimally to the acute stress. It is recommended that such patients receive 50 mg. of ACTH at six-hour intervals until they can be seen in consultation by a physician with special training in problems related to the therapeutic application of ACTH and cortisone. Even the absence of circulating eosinophils in such situations does not mean that the patient will not benefit from additional ACTH or cortisone but indicates only that an actual acute deficiency is less likely. Application of these principles need not be confined to gout patients, since an impaired hypothalamo-pituitary-adrenocortical system may be a critical remediable factor in any patient who is doing poorly in an emergency situation.[8]

Summary

1. The use of ACTH as a practical treatment for acute gouty arthritis depends upon its ability to suppress attacks rapidly when given in adequate dosage and upon the property of colchicine to prevent a return of the attack when ACTH is withdrawn. This permits treatment with amounts of ACTH sufficiently small to be economical and to obviate the possibility of overdosage effects. A review of the physiology of acute gouty arthritis suggests that administration of ACTH is an etiologic therapy.

2. Patients treated with the currently available aqueous ACTH preparations are given 50 mg. every six hours until 75 to 90 per cent relief is obtained; this almost always occurs within twenty-four hours. Colchicine is given concurrently and continued when the ACTH is stopped. The average ACTH dose required to terminate thirty-eight attacks of acute gouty arthritis was 98 mg. Attacks occurring in chronically colchicinized patients and attacks previously treated unsuccessfully with colchicine required a somewhat larger average total dosage; previously untreated attacks required somewhat smaller average amounts.

3. Twelve of thirteen attacks were terminated with single 100 mg. doses of Polyvinyl-Adactar, an experimental long-acting ACTH preparation. One attack required two such doses. This series, which included eight colchicine-resistant attacks, suggests that combined Polyvinyl-Adactar and colchicine treatment of acute gouty arthritis closely approaches ideal therapy.

4. In certain medical and surgical emergencies, the prophylactic use of ACTH or cortisone appears indicated to support the impaired mechanism for mobilizing resistance to stress which is characteristic of patients with gout. Specific suggestions for management of such situations are given.

When supplies for general distribution are made available, the term *Adactar* will be used by the Armour Laboratories to designate the preparation termed Polyvinyl-Adactar in the present report.

Acknowledgment

Generous supplies of purified pituitary adrenocorticotrophin (ACTH, Armour) have been made available for our studies by The Armour Laboratories through the co-operation of their medical directors, J. R. Mote, M.D., and J. A. Hubata, M.D. Dr. H. F. Hailman, medical director of The Upjohn Company, kindly supplied the Lipo-Adrenal Cortex (Upjohn) used in studying the direct effect of adrenal cortical extract on acute gouty arthritis.

Technical assistance given by Miss Clarice Shore, Miss Wilma Barth, Mrs. Myrtle Koopman, Mrs. Elizabeth Smith, and Miss Mioko Eya has been essential in the continued progress of these investigations.

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(Continued on Page 1083)

A Study of the Immediate Effects of ACTH on the Histopathology of Felty's Syndrome

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WHEN FELTY,[4] in 1924, described a disease characterized by rheumatoid arthritis, splenomegaly, leukopenia, anemia, and lymphatic enlargement, he believed that these several manifestations were the result of one fundamental pathological process. Though, subsequently, numerous reports of similar cases appeared in the literature, it was not until 1940 that Curtis and Pollard[2] reported a series of cases in which they believed that the generalized disease known as Felty's syndrome had the common denominator of increased lymphocytic infiltration in all the tissues of the body. Subcutaneous accumulation of lymphocytes, increase in size of the lymphatic centers of the body, together with severe multiple arthritic involvement and hemopoietic depression, characterized the syndrome. They agreed with Felty and other writers that in all probability the condition was caused by "a noxa, which simultaneously affects the joints, the spleen, and the blood leukocytes."

In the light of new evidence that has been shed upon the pathology of rheumatoid arthritis in recent years by Freund,[5] Steiner,[10] Desmarais et al,[3] Rich,[8] and Selye,[9] and because of the effects that the adrenocorticotropic hormone and the adrenocortico hormones[6,11] have upon the whole group of rheumatic diseases, it was thought that a critical study of a typical case of Felty's syndrome might shed new light upon the process as a whole and upon the lymphocyte and lymphocytic infiltrations and nodules in particular. Experimentally, these hormones have been shown to profoundly affect the eosinophils. It is only ACTH, however, that has been shown to have a destructive action upon the lymphocyte. White[12] has thoroughly discussed this subject.

This report will deal only with the effects of ACTH on the lymphocyte, on lymphatic infiltrations in muscle, and on the subcutaneous nodule. Biochemical manifestations already frequently recorded in studies on rheumatoid arthritis have not been described in the Felty's syndrome. These will be reported fully in a subsequent paper. Norcross et al[7] reported the results of investigations of the effect of Cortone Acetate on the muscle histopathology of rheumatoid arthritis. He has observed some changes in the lymphocytic infiltrations in muscle tissue in some instances.

This investigation was carried out in the Research Department of Harper Hospital under a grant from the National Foundation of Rochester, Michigan.

Report of Case

D. W., aged fifty-five, male, white, married. The illness began in the spring of 1945 at which time toes ached and feet began to burn. Soon after that, the ankles swelled and stiffness developed in the feet. In December of that year, the patient noticed the loss of weight, increased weakness, periods of diffuse sweating, and increased pallor. At the same time, the fingers began to get stiff, the joints swelled; he became progressively weaker. In the spring of 1946, swelling appeared in both knees, his gait dragged, and he noticed an inability to utilize his hands and arms freely. At about that time, swellings appeared at each elbow, and soon after several more developed along the outer side of each forearm. Later, several similar enlargements appeared in the back. There had not been a great loss of appetite, his bowels were regular, and he suffered no urinary difficulties. He has never noticed any enlargement of his abdomen.

Physical examination revealed a pale, sick-looking man who stood with bent knees and a foreward arch of his back. He moved with difficulty and with apparent pain, though he was able to walk with a slow, shuffling gait. The skin was pale. There were areas of leukopathia acquisita symetrically distributed over his body. Two small patches of psoriasis were present at each elbow. The sclera were pale, pupils reacted to light and accommodation. There was marked pallor of his mucous membranes. The mouth was edentulous. The heart and lungs were essentially normal. The abdomen was on the level of the ribs. There were no tender areas. The margin of the liver was palpable. The spleen extended as a smooth, firm organ for about four fingerbreadths below the margin of the ribs. It moved on respiration. The notch was felt. There was slight general glandular enlargement. Widely distributed over the body, yet particularly along the ulna of each forearm and in the subcutaneous tissue of his back and in the lateral walls of the abdomen, movable irregular nodules varying in size from a small pea to a cherry were seen and felt. These were free in the subcutaneous tissue and not tender. None of them had ulcerated. All the joints of his body except the jaws were affected. The arthritic process was particularly notable in the hands and feet. There was ulnar deviation of both hands (Fig. 1), fusiform swelling about the joints, and the ankles, knees, and elbows had lost their normal contour. Interosseous atrophy noticeable particularly in the hands, but also evident in the other large muscles of his body, was marked.

X-ray report on May 29, 1950 was as follows: "At the present time, there is extensive rheumatoid arthritis with atrophy of the bony structures, as well as soft tissue atrophy. There is loss of the joint spacing at all of the joints. Irregular destruction of bone has occurred at the

proximal interphalangeal joint on the right in the little finger. Subluxations have occurred at the distal interphalangeal joint of the left index finger and the metacarpophalangeal joints of all the digits of the right hand. Bone destruction has occurred in the proximal row of

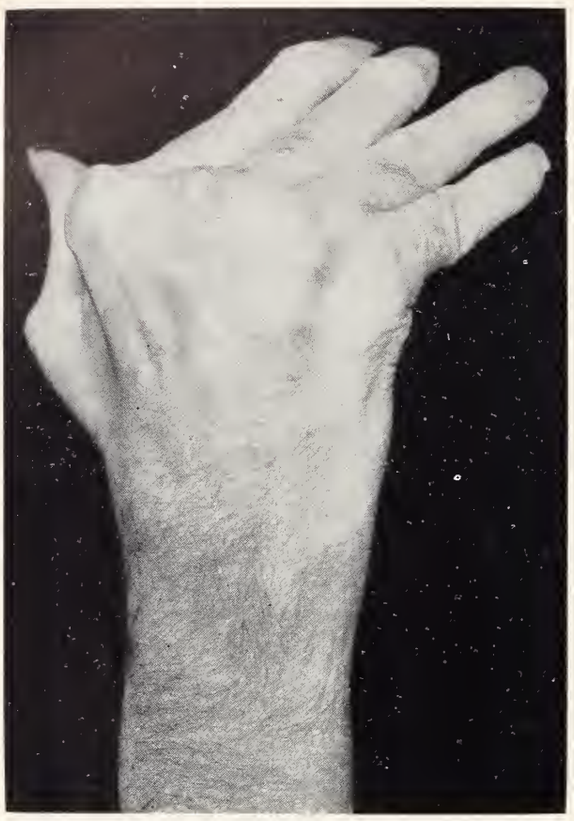

Fig. 1.

carpals at each wrist. Practically all of these changes have occurred since the first x-ray in 1945. The disease is more advanced on the right."

Blood count, May 29, 1945 was as follows: Hemoglobin 61 per cent, red blood cells 3,370,000, white blood cells 6,500. Polys 66, lymphs 26, eosinophils 3, monocytes 5. There was considerable pallor of the red cells with moderate anisocytosis. The urine was essentially normal. Electrocardiogram was normal for a man of his age. The Kahn was negative. Sedimentation rate was 50 mm. in one hour.

A subcutaneous nodule was removed from the forearm and a piece of muscle from the vastus externus on the day after admission to the hospital. The histopathological reports by Drs. Morse and Brosius were as follows:

1. Rheumatoid nodule.

2. Localized areas of leukocytic infiltration and low grade myositis. Areas of infiltration consisted chiefly of eosinophils.

See Figure 2.

Because it has been shown that the administration of ACTH produces a rapid fall in the total circulating eosinophils and in the lymphocytes, it was planned to make these estimations at hourly periods following the administration of the initial 25 mg. of ACTH, and again after the second 25 mg. was given. Simultaneously, a subcutaneous nodule was removed. (Table I).

On June 4, the total circulating eosinophils averaged 189 per cu. mm., the total circulating lymphocytes averaged 1624 per cu. mm. The patient's activity was only partly limited during the first week. The blood counts were not made at the same time each day, and varied considerably.

Before treatment a glucose tolerance test was as follows:

Fasting	.094 gm. per 100 c.c. of blood
½ hour	.068 gm. per 100 c.c. of blood
1 hour	.238 gm. per 100 c.c. of blood
2 hours	.186 gm. per 100 c.c. of blood
3 hours	.092 gm. per 100 c.c. of blood
4 hours	.100 gm. per 100 c.c. of blood

The blood sodium was 267. 0mg. per 100 c.c. of blood.

The blood potassium was 11.5 mg. per c.c. of blood.

The averages of 24-hour output of uric acid, sodium and potassium while on a minimum sodium diet for four days prior to receiving ACTH were as follows:

Uric acid	0.255 grams
Sodium	1.860 grams
Potassium	2.260 grams

After the administration of ACTH, the average daily output of uric acid and of potassium each nearly doubled in amount, whereas the sodium excretion fell to about one third the previous amount. (These results will be reported fully in a subsequent paper.)

There was no noteworthy change in the patient's glucose tolerance curve.

The sedimentation rate fell to 18 mm. (1 hr. Wintrobe method) in one week after treatment was begun. The total red blood count and hemoglobin slowly rose to a nearly normal level.

The patient's general condition, mobility of joints, appetite, sense of well being, all showed striking improvement promptly with diminution of pain. The size of the spleen was a little smaller at the end of one week. A few subcutaneous nodules were slightly smaller. Further observations will be reported after more time has elapsed.

TABLE I

TIME	White Blood Cells	Circulating Lymphocytes	Circulating Eosinophils
2:00†	6,800	1565	187
3:05	7,900	1580	169
4:05	6,800	1224	81
5:10	9,000*	1620	87.5
8:05†	7,500	988	25.

*20 minutes after evening meal.
†ACTH—25 mg. given at 2:05 p.m. and again at 8:05 p.m.

Discussion

As the chief purposes of this report are towfold, namely to note: (1) the effect on the total circulating eosinophils, and (2) the nature and rate of change occurring in the subcutaneous nodules following the administration of an average dose of ACTH, only these two results will be discussed.

It is evident from the study of this single case of Felty's syndrome that a rapid fall in both the circulating eosinophils and the lymphocytes occurs.

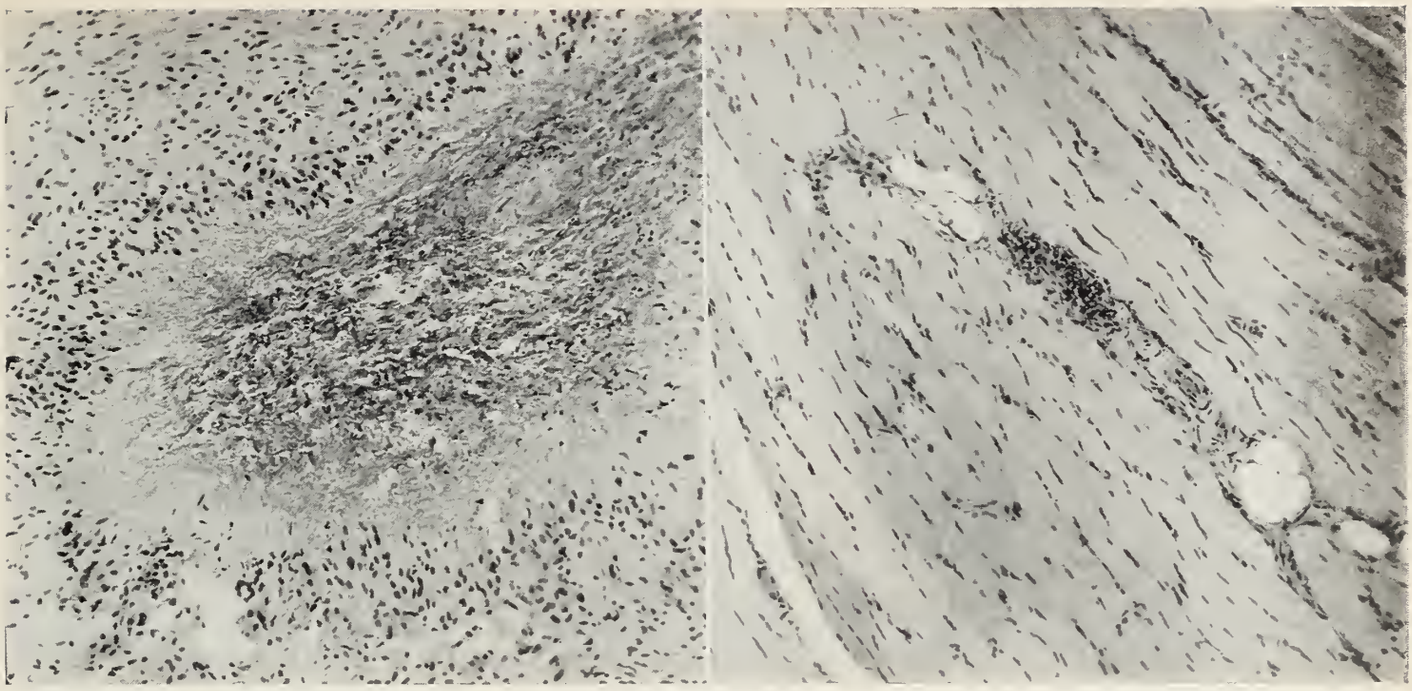

Fig. 2.

The former revealed this change to be in evidence in two hours after the administration of 25 mg. of ACTH; the latter not until a somewhat later period, that is, within six hours. Apparently, however, 25 mg. was sufficient in this patient to produce the alterations noted. Subsequent studies which were continued will be reported later.

So far as careful studies of the sections of subcutaneous nodules serially are concerned, no changes can be recognized in the time between the first and second injection of 25 mg. of ACTH. From time to time sections of nodules and one of muscle have since been removed for study. A large number of serial sections of these tissues over a longer period of time will be required to reach any conclusion with respect to the ultimate effects of prolonged controlled administration of ACTH upon the histopathology of the subcutaneous nodule and upon the widely prevalent muscle nodule.

Summary

A study of the early effect of ACTH upon circulating eosinophils, circulating lymphocytes, and subcutaneous nodules is presented.

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CENSUS REPORT SHOWS TIGHTENING UP OF STATE FINANCES

One underlying reason for states' dependence on federal grants is highlighted in a new Census Bureau report. It shows a reversal of budget trends in 1949; in 1948 and back through the war years income topped expenditures, but this was reversed for the first time in 1949. In that year *income dropped below expenditures by 7.2 per cent.* Increased revenue of 9.6 per cent was overbalanced by a 13.3 per cent increase in expenditures. Expressed in another way, in 1948 income exceeded outgo in thirty-two states, but in 1949 outgo exceeded income in thirty-three states. (This *does not mean* the thirty-three states are in debt; only nine states report their liabilities exceed their assets.)

This reversal took place in spite of the fact that included in the states' revenue are federal grants, which *increased approximately 20 per cent* between 1948 and 1949. The figures are $1,399,000,000 U. S. grants to states in 1948 and $1,705,000,000 in 1949. (Direct U. S. payments to individuals are not included in their tabulation. In 1949 these totaled an additional $3,638,921,248).

One state, Mississippi, received more money back from the federal government in grants *than it paid in federal taxes* (107 per cent of its tax payments). Other states with a high return ratio are Alabama, 51 per cent return; New Mexico, 58 per cent; Wyoming, 51 per cent; North Dakota, 47 per cent. On the other end of the scale are Delaware with a three per cent return and New York with five per cent. Other low-return states are Illinois, 7.8 per cent; Michigan, 7.55; Ohio, 8.62 and Virginia, 9.72.

A high percentage of federal grants are in the health services field: hospitals, disease control programs, research, aid to the handicapped, old age assistance.

Treatment of Osteoarthritis with ACTH

By Mark Dale, M.D.

Detroit, Michigan

IN A RECENT report of experiences with cortisone acetate and pituitary ACTH used in cases of rheumatoid arthritis, rheumatic fever and other conditions, Hench, Kendall, Slocumb, and Polley[1] include in their series one case of osteoarthritis treated with cortisone.

Thorn et al[2] also report one case of osteoarthritis treated with ACTH in a recent survey of many conditions given this type of therapy.

As a part of the ACTH program of the Highland Park General Hospital two cases of osteoarthritis were treated with ACTH and are reported herein.

The patient reported by Hench et al was a sixty-nine-year-old rancher with chronic lymphatic leukemia and coexistent osteoarthritis of the left knee of fifteen years duration. The patient was given cortisone for a total dose of 2 gm. within eighteen days. The stiffness and pain in the knee disappeared. The patient was able to squat readily, and for the first time in ten or fifteen years he could put his left leg on his right knee. As far as the arthritis was concerned, he remained symptom-free for a month after cessation of treatment.

The patient of Thorn et al had generalized osteoarthritis and associated bilateral malum coxae senilis. This patient was treated with ACTH in a dose of 10 mg. every six hours for seven days. There was marked alleviation of pain and increased mobility of joints within twenty-four hours of the beginning of therapy. There was no mention made of the permanence of the relief of symptoms.

Report of Cases

Case 1.—The patient was a fifty-year-old white male physician who complained of severe chronic pain in the neck with radiation into the right deltoid region. The pain was associated with stiffness and was aggravated by damp weather. The symptoms had been present about six or eight months. Movement of the neck laterally would produce pain of sharp, severe degree. He had used salicylates in various combinations, local heat, massage and cervical traction to no avail. Physical examination revealed limitation of lateral movement of the neck and crepitus over the cervical spine on such movement. X-rays of the cervical spine can be seen in Figure 1.

Treatment: The patient was given ACTH, 50 mg. daily, in a single intramuscular dose for six days, and 60 mg. daily for two more days thereafter. The treatment was interrupted on the ninth day because of the development of a large abscess at the site of one of the injections. The abscess was about 6 to 8 cm. in diameter, hot, red and fluctuant. Of interest is the fact that the area was not incised, but 400,000 units of procaine-penicillin was given intramuscularly in another site, and within twenty-four hours the abscess had virtually disappeared. The rapidity of the resolution of this lesion was remarkable. Whether or not this extremely rapid disappearance of the abscess was the result of the ACTH therapy is open to question.

Result: Within forty-eight hours, the patient noticed marked improvement in the neck condition. Pain began to resolve and he experienced a general feeling of well-being. At the end of eight days of treatment, there was no pain and no stiffness and he was very much better. Forty-nine days after treatment was ended, the patient experienced no severe sharp pain as he had previously, but during damp weather he would feel some mild aching.

Case 2.—This patient was a fifty-four-year-old white male tool-maker who had been troubled with swollen, stiff, painful joints for the past twelve years. In the past two years his symptoms became so severe that he frequently stayed home from work. The joints affected were the ankles, knees, wrists, and fingers, as well as the entire lumbar area. He had lost considerable weight and the pain necessitated his taking large amounts of salicylates and codeine. Motion, inclement weather, and excessive exertion all aggravated his condition.

Physical examination revealed typical osteoarthritis involving the fingers and the knees. Heberden's nodes could be seen and palpated on the fingers, and the knee joints were swollen, stiff and crepitant on movement.

X-rays of the lumbar spine, viewed during gastrointestinal examination, revealed typical osteoarthritic changes (Fig. 2).

Treatment: The patient was treated with ACTH on a progressive dosage scale as given on the accompanying chart (Fig. 3).

Results: The patient began to improve on about the third day of treatment and this improvement became rapid and progressive. He became energetic and quite euphoric and on the day of his discharge from the hospital, the fourteenth day of treatment, he was able to jump in the air and click his heels to show how good he felt. At this time his grip was strong enough to cause pain in the examiner's hands with an ordinary handshake.

From the Department of Internal Medicine, Highland Park General Hospital, Highland Park, Michigan.

Thanks are due Dr. William Elliott for the use of his case in this report and to the members of the ACTH committee, Dr. Langdon Crane and Dr. Edson Rupp.

Fig. 1. Osteoarthritic changes in the cervical spine of Case 1.

Fig. 2. Osteoarthritic changes in the lumbar spine seen during gastrointestinal x-rays.

Discussion

Both of these cases of osteoarthritis of relatively long duration displayed dramatic improvement with ACTH therapy. The eosinophile response was in inverse proportion to the dosage of the drug as seen in Figure 3. This type of response was well-illustrated in both cases, Case 1 having the same response pattern as Case 2.

Case 1 showed no evidence of glycosuria while Case 2 showed only traces of urinary dextrose on several occasions. A glucose tolerance test was done during the ACTH therapy on Case 2 with a perfectly normal response. Neither case showed an appreciable rise in blood pressure. Case 1 showed a weight increment of three pounds in seven days, while Case 2 gained four and one-half pounds in fourteen days. Urinary output in both cases did not vary a great deal from normal during the therapy period.

Conclusions

1. Two cases of osteoarthritis are presented which were treated with pituitary ACTH. Both cases displayed dramatic relief of symptoms.

2. Pituitary ACTH is apparently of value in the treatment of osteoarthritis.

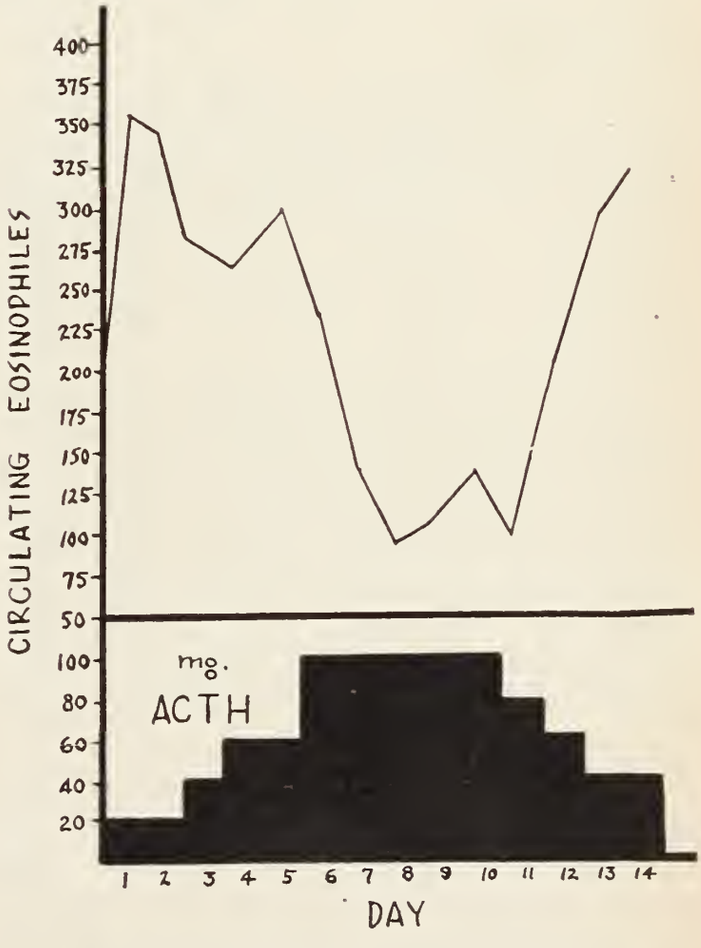

Fig. 3.

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Osteoarthritis and Body Mechanics

By F. X. Krynicki, M.D.
Detroit, Michigan

MOST AUTHORITIES speak of osteoarthritis occurring in persons past forty but not commonly before that age. In the absence of rheumatoid arthritis, of rheumatic fever, or of any of the usually recognized chronic arthritides in an individual under forty a void is left in the diagnosis of chronic arthritis. Faulty body mechanics suggests an answer because much of the pain can be eliminated by the correction of such faults.

Jones[8] reported the elimination of various pains which were considered neuralgias, in the course of his treatment for low backache. On comparing the symptoms of patients having osteoarthritis with the neuralgias which Jones described, the writer found many similarities and concluded that the physiological changes in one case applied to the second, and vice versa.

Jones' observations were confirmed by the writer in relation to functions connected with the autonomic nervous system. These are similar to those made by other workers and were seen with such regularity that coincidence was discounted. They have to do with relief of apparently non-related conditions such as, constipation, fatigue, dysmenorrhea,[11] and so on.

It is known that many patients have roentgenologic evidence of arthritis without pain. A smaller number with such evidence has painful symptoms in some of the joints. Others, while showing no roentgenologic evidence, have painful symptoms identical with those who have x-ray findings. It would appear, therefore, that the common factor of pain is not consistently related to objective indications of degeneration nor to their absence.

The correction of faulty body mechanics in arthritis and in the rheumatic diseases has been advocated by authorities for a long time.[3] The means to the end are not always clear, however, with the result that this modality does not have the wide application that it deserves. The writer feels that with an understandable physiology of body mechanics, correction of some of its faults will be more generally acceptable.

Body Mechanics

Body mechanics refers to the forces applied to the movable parts of the musculoskeletal system on standing or walking. The movable parts are the joints and the soft tissues about them. When the joint surfaces are in normal relationship to each other, there is no stress, no torsion in the joint, and no tension in the soft tissues about the joint. Faulty body mechanics means that these forces are wrongly applied, and since mechanics deals with dynamic manifestations, the forces are applied only during weight bearing. In the abnormal position, there are torsions or partial appositions of the joint surfaces resulting in tension of the soft tissues about them, which, if of sufficient degree or of sufficient duration, may result in pain.

One of the common nonsurgical causes for impairment in body mechanics is a shortened lower extremity. There is a more subtle cause for faulty body mechanics, however, one which is much more common, is usually overlooked, and is related directly to faulty foot posture.

Jones[7] states that when an individual stands or walks there is a tendency for the medial aspect of the foot to be pushed down toward the position assumed by a flat foot. This is due to the obviously great weight carried by the foot at its lateral aspect with little support medially. He calls this inrolling, or pronation.* When the foot rolls in, the entire leg rotates about its longitudinal axis. Proof of this may be had by observing the patella while the patient stands on the lateral aspect of each foot. The patella will move medially when the normal standing position is then taken. The examiner, moreover, will observe a change in relationship between the internal and the external malleoli when the patient goes through the above maneuver (Fig. 1). An imaginary line drawn through the malleoli in both positions of the foot will form different angles with the longitudinal axis, due to forward motion of the external malleolus in relation to the internal malleolus.

When the leg rotates, the pelvis rotates about its right to left horizontal axis, so that the anterior-superior spine moves downward. This can be proved by taking a roentgenogram of the pelvis in the lateral position while the patient is standing in stocking feet.[5] Another roentgenogram of the pelvis is then taken while the patient is standing

*The author uses the terms "inrolling" and "pronation" interchangeably. This is not strictly correct because pronation, according to standard dictionaries, refers to the hands and not to the feet.

on the lateral aspect of each foot in an exaggerated position such as described above. This raises the longitudinal arch. A line is then drawn on the film across the superior surface of the sacrum to a horizontal line, and the angle so formed is noted (Fig. 2). In the case of the individual standing in his normal position, the angle will be greater than the angle formed in the case where the patient is standing on the lateral aspect of each foot. This gives us roentgenographic proof of the motion of the pelvis in relation to the horizontal plane, and in turn between the pelvis and the movable lumbar vertebrae.

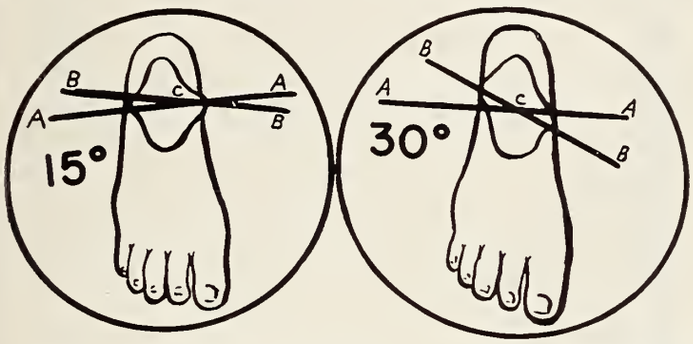

Fig. 1. *(left)* Section across the level of the malleoli with depression of the medial longitudinal arch (pronation). *(right)* Section across the level of the malleoli with elevation of the medial longitudinal arch toward the ideal position.

Line AA is at a right angle to the longitudinal axis of the foot. BB is a line drawn through the internal and external malleoli. In pronation the angle ACB is about 15 degrees. In the ideal position the angle is about 30 degrees. (Jones).

With fascial attachments common to the sacrum and the vertebrae one can visualize that rotation of the pelvis must result in some movement of the fifth lumbar vertebra. For the same reason motion in this vertebra is transmitted to the fourth, and likewise to the third, second, and, in a diminishing gradient, to all the segments up to the top of the vertebral system.

The abnormal relationships between the vertebrae frequently result in irritation of the nerves as they leave the intervertebral foramina, resulting in various neuralgias. These are exemplified by intercostal neuralgia, abdominal neuralgia, pelvic neuralgia, neuralgia of the upper and lower extremities, and the various paraesthesias of the leg, arm, and hand (e.g., numbness, tingling, and sensation of heat which probably are the early stages of the shoulder hand syndrome, secondary to cervical osteoarthritis described by Steinbrocker, Spitzer, and Friedman[12]).

In the presence of symptomatic lordosis** the lumbar nerves are angulated in front of the lumbosacral region while distally, as the sciatic nerve, additional angulation obtains at the sciatic notch. Since nerves are not overly elastic, a mechanical pull is transmitted upward to the spinal cord through the cauda equina. It is not great, but is possibly of an intensity sufficient to affect the central nervous system, resulting in some of the systemic effects described in the literature.[1,2] Moreover, the intervertebral or segmental nerves may be irritated by this mechanism, resulting in neuralgias similar to the ones to which reference has already been made. Both mechanisms for irritation may, through the rami communicantes, transmit their damaging impulses to the sympathetic ganglia, and thus to the entire sympathetic system.

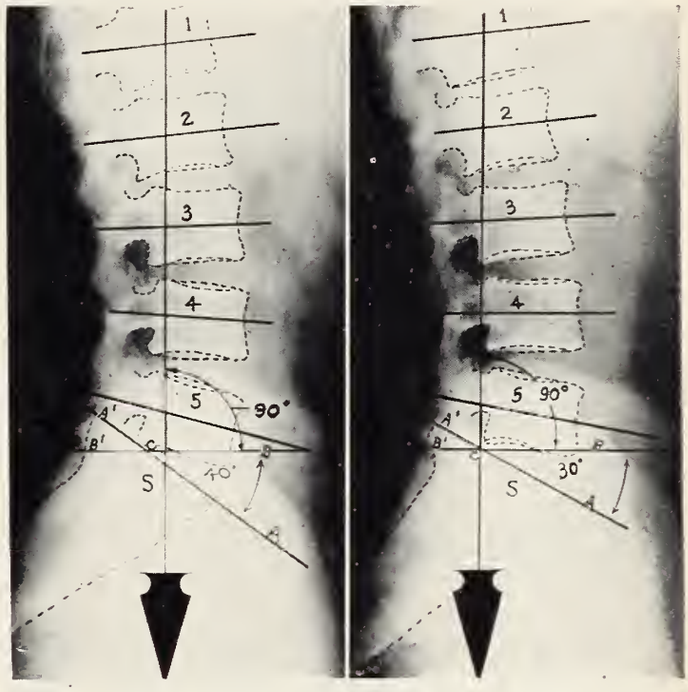

Fig. 2. *(left)* Lateral view of the lumbosacral region of patient standing erect, who has a depression of the medial longitudinal arch (pronation). *(right)* Lateral view of the lumbosacral region of patient standing erect, who has an elevation of the medial longitudinal arch toward the ideal.

Line AA is across the superior surface of the sacrum. Line BB is the horizontal. When the medial longitudinal arch is depressed (pronation), the angle ACB is 40 degrees; it is 30 degrees when the arch is raised. These figures, for the patient under consideration, show the relationship between pronation and right to left horizontal rotation of the pelvis. (Jones).

We have, therefore, two possible causes for pain: one due to the direct application of force to the joint and the soft tissues about it, and the other, due to neuralgia.

Correction of Faulty Body Mechanics

If it is true that inrolling or pronation is accompanied by serial distortions in the joints of the lower extremity and of those of the vertebral column, then raising the medial longitudinal arch

**Lordosis is a term which describes a normal structure. As usually employed, it implies an abnormal state related to pain or other changes. When lordosis is associated with symptoms, the term symptomatic lordosis would appear to be more appropriate.

of the foot toward the ideal position should reverse the entire process. Furthermore, if many of the symptoms are directly or indirectly due to these distortions and tensions, then they should likewise disappear on correction of the fault in foot posture. The writer has found these observations to be clinically verifiable.

Changing the foot from the pronated to the more ideal position is a purely mechanical procedure and can be accomplished by mechanical means.[5] It is merely necessary that the patient wear a shoe which is adequate to support the longitudinal arch and thus to counteract the serious consequences of pronation. Many patients have a normal appearing foot which, however, on closer inspection will be found to be the seat of pronation and the basis for painful and other symptoms.

Few shoes made today can long support a foot that is pronated or the seat of inrolling. Removable arch supports or reinforced shoes such as have been described to date do not adequately support the arch for an appreciable length of time in a sufficiently large number of cases. Since great pressure is applied to the arch on walking or standing, a support must be adapted which can withstand this force. To begin with, therefore, a strong, new shoe, which has a long counter and a steel shank, is reinforced with five or six layers of fiber glass made non-yielding by cementing them with a special fluid which hardens on drying.[6] This becomes an integral part of the shoe. Rubber devices are then inserted which effectively raise the longitudinal arch. The reinforcement is of prime importance and is unalterably basic to the entire procedure.

Treatment

When the patient wears this type of shoe, his foot posture tends to approach the ideal, and the various joints tend to become realigned. Uncomplicated neuralgias tend to disappear in a relatively short time. Moreover, when irritation of or about the joint is not too great, the mere correction of foot posture is sufficient to eliminate the painful symptoms. If, however, there is a great deal of irritation from torsion or unequal joint pressure resulting in constant or severe pain, treatment for their alleviation must be added. It is here where the present day standard therapy of osteoarthritis is of value, which consists, in a word, in the use of salicylates, anodynes, parenteral foreign protein (vaccines, sulfur, and so on), intravenous procaine, physical therapy, local procaine injections, and so forth. It should eliminate the secondary effects of irritation usually listed under the heading of spasm and swelling,[4] which when once accomplished permits the automatic serial reversability produced by raising the longitudinal arch. The relief obtained then tends to be effective so long as the patient wears supportive foot gear.

TABLE I. SYMPTOM-CLASSIFICATION REPORT

Total number of cases reported: 55	Male 35%	Female 65%
Location of pain	Number	Per cent of total
Low back	36	65
Knees	20	36
Shoulders	17	31
Cervical	15	27
Hips	13	24
Dorsal	12	22
Sciatica	14	25
Fingers	14	25
Toes	11	20
Ankles	11	20
Wrists	12	22
Elbows	10	18
Precordial	5	9
Thigh Muscles	8	15
Sternal	6	11
Leg Muscles	6	11
Temporo Mandibular	2	4
Right arm	2	4
Left arm	2	4
Left lower quadrant	3	5
Right chest	1	2
Left upper quadrant	2	4
Right groin	2	4
Left groin	1	2

That change in position of joint surfaces occurs when pronation is corrected is borne out not only by the relief obtained, but also frequently by a temporary increase in pain in a given joint. Moreover, correction now and then initiates pain for a short time in regions never or seldom the seat of any discomfort.

The writer carried out the treatment as above described, using correction of faulty body mechanics in each case. At first this work went along in a rather routine manner, but it soon became apparent that we were dealing with an unusual therapeutic medium, because the results were more gratifying than had been obtained by previous methods. Studies were therefore made covering about 150 patients with osteoarthritis or with fibrositis. The figures to be presented, however, refer only to those patients who have been discharged, thus making for a smaller series of cases. However, the importance of the presentation lies mainly in the significance of the solution of the many difficult problems of osteoarthritis and fibrositis by relatively simple means and in the anticipation of favorable results when a patient is seen for the first time.

It is often difficult to differentiate between pa-

tients with osteoarthritis and fibrositis, but since the therapy followed is usually the same in either case, the writer resorted, for the purposes of this paper, to a symptom-classification based on the anatomical site of pain (Table I). Thus, when a patient had pain in the fingers and in the neck, the two locations were so listed and reported.

Of the cases studied, approximately two out of three had low backache, and for this reason details of treatment of this condition will be given below. Most of the patients had complete relief of pain. However, in Table II is a list of conditions in this series which were partly or completely resistant to therapy.

TABLE II

Partial Relief of Pain:	Number	Represents
Elbows	1	10% of patients with elbow pain
Knees	1	5% of patients with knee pain
No Relief of Pain:		
Knees	1	5% of patients with knee pain
Low back	1	2.8% of patients with low back pain
Sciatica	3	21% of patients with sciatica

The figures for percentage of frank failure are significantly small. Except for one patient, all symptoms were present for at least three months. This work was done on private patients with the advantages and disadvantages of that relationship, and it is felt that with greater perseverance or with group type practice more could be accomplished. The list of patients having sciatica includes early cases which were extremely severe, but more recent figures indicate a statistical improvement.

Treatment of Low Back Pain and Sciatica

In sciatica and low back pain the prime aim is to eliminate spasm,[4] which is accomplished by the use of traction. After the skin has been painted with tincture of benzoin, a 3-inch strip of moleskin adhesive is applied to both sides of each leg from the mid-thigh to just above the ankle, held securely by a non-rubber elastic bandage. The ends of the adhesive are attached to a foot plate, which in turn, is attached to weights (5 to 10 pounds) which keep the extremities in traction (Fig. 3). The traction is kept on for two hours and off two hours during waking hours, for a total of five days. Most patients have complete relief of pain at this time, but if symptoms persist or return after five days of "rest," the procedure is repeated once and sometimes twice. The patient is permitted bathroom privileges when out of traction but must wear supportive shoes whenever he walks about.

When the foot is in pronation, the sciatic nerve is angulated at the sciatic notch and as the lumbar plexus, in front of the lumbosacral region, resulting in tension with either persistence of symptoms or a tendency to their recurrence. With correction the tension is lessened, resulting in more efficient therapeutic action.

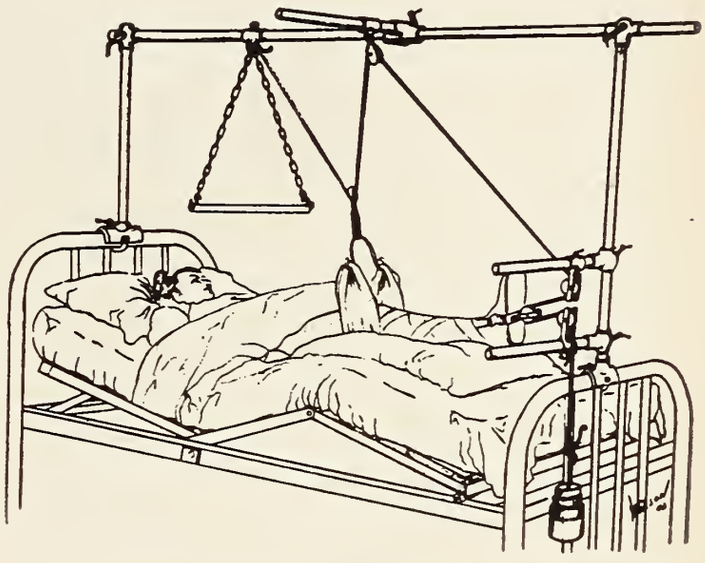

Fig. 3. Modified balanced or Russell traction. The rope, instead of starting at the knee sling, starts from the over-head at a point beyond. A pulley is attached to the knee sling, permitting the apparatus to follow patient's movements more freely. (Jones).

In the general treatment of osteoarthritis and fibrositis weight reduction was not practiced, and it was observed that the benefits from correction of faulty body mechanics were not lessened. If the physiology of body mechanics is true it ought to apply regardless of weight, and the results listed tend to point in this direction.

Exercises were held to a minimum for the same reason. Many patients with osteoarthritis, with or without backache, are exhausted, and on arising in the morning feel as though they had not slept at all. It did not seem proper to request exercises under these circumstances. Moreover, some of the standard exercises require day long concentration which is hardly possible except under direct and constant supervision such as may obtain in a clinic.

Case Histories

Figure 4 shows a sample of the form used in enumerating the location of pain.

These symptoms were not present all the time in all patients. Some had pain occasionally but this was of sufficient intensity and frequency to be immediately pointed out to the writer during history taking. Under fingers, for example, pain may have been present in one finger alone or in all;

either in one or more joints. The same is true of the rest of the list.

Of sixty x-ray reports picked out at random twenty-five were found to have evidence of arthritic changes in the sacroiliac joints, but the results of treatment were similar regardless of these findings.

OSTEOARTHRITIS-LOW BACKACHE-FIBROSITIS SYMPTOM CHART

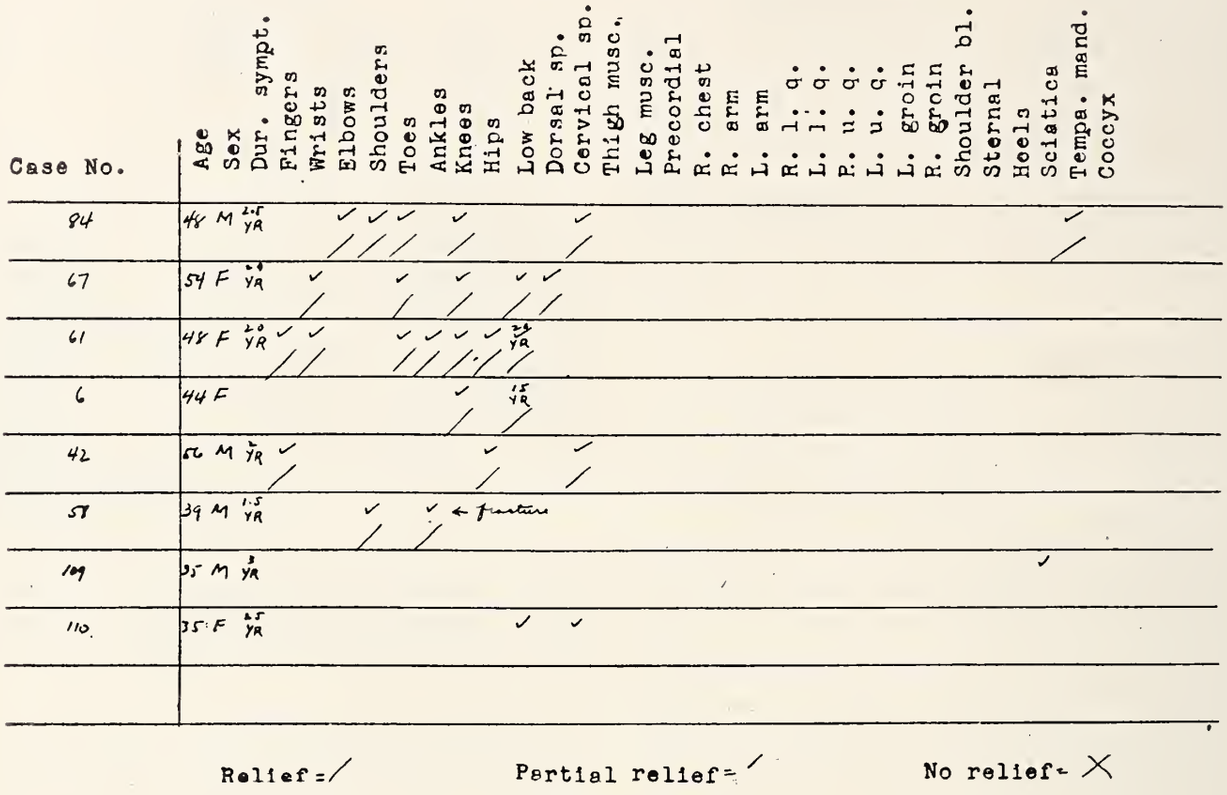

Fig. 4.

Case Histories

Case No. 84.—Man, aged forty-eight, a dentist. Painful symptoms of two and a half years duration. Began with severe pain in the right then the left shoulder. X-ray treatments eliminated these pains. Other pains came on as per serial symptom outline. About four weeks after correction was instituted all pains were gone as were other symptoms such as stiffness in the fingers, wrists, and back of neck.

Remarks: The rapidity of reversal of symptoms suggests that the pains were neuralgic. This patient is in the osteoarthritis age.

Case No. 67.—Woman, aged fifty-four, a factory worker. The outstanding feature of this case, aside from general aches and pains, is the exquisite pain which the patient had over the medial aspect of the head of the left radius. She had ultra short wave treatments, vaccines, sulphur and salicylates with no relief. Two days after wearing corrective shoes, the pain over the radius had disappeared. Ten weeks later the patient had no pain at all although no treatment was given after foot posture was corrected.

Remarks: The important feature here was the rapid elimination of pain over the radius. This was obviously a neuralgia, although the patient has, by usual standards, an osteoarthritis.

Case No. 61.—Woman, aged forty-eight, a typist. Case of osteoarthritis. Began wearing shoes June 18, 1949. June 25, 1949: A few twinges of pain in low back this week. July 7, 1949: No backache (for first time in twenty years), no pain in knees. July 22, 1949: No pain in distal interphalangeal joints (!) except in the right middle finger. No pain in wrist. August 6, 1949: All pains gone except in distal interphalangeal joint on right. November 1, 1949: No pain anywhere.

Remarks: (1) This is a case of generalized osteoarthritis and of fibrositis in the low back region. (2) Pain in distal interphalangeal joints would ordinarily be classified as being due to trauma, and the patient ordered to cease using the typewriter. (3) Relief without any other therapy than foot posture correction suggests faulty body mechanics as the actual basis for the production of pain in this case whether in the fingers, low back, or other regions.

Case No. 6.—Woman, aged forty-four, a housewife. Low back pain. Began wearing shoes January 14, 1949. Increase of pain five days later. This is a reaction which occurs, if at all, within fourteen days, and is probably the result of change in the angle between the superior sur-

face of the sacrum and the inferior surface of the fifth lumbar vertebrae. Patient received intravenous procaine infusions, ultra short wave treatments, mild massages, and one local injection of intracaine from January 6, to July 9, 1949, in fifteen office visits.

Remarks: This case illustrates that in spite of what we called lackadaisical co-operation on the part of the patient she obtained complete relief of a backache of fifteen years' duration. When inflammation is a complicating factor, as was the case here, physiotherapy, intravenous procaine, the salicylates, codeine, and all the other modalities are mobilized in the attack. These are indicated when relief is not obtained on lying down, or when there is an increase in pain during treatment.

Case No. 42.—Man, aged fifty-six, a factory worker. This patient complained of pain in the proximal interphalangeal joint of the middle finger of each hand. He stated that he bowls a great deal. One might readily assume that here indeed was a case with trauma of a special type as a factor. However, the pain was present in both the right and left hands. Since bowling is done mainly with one hand rather than two, the traumatic factor was ruled out and the patient was given treatment. X-rays showed spur formation in the cervical region and osteoarthritic changes in the fingers.

Remarks: Relief of pain in spite of evidences of advanced osteoarthritis suggest neuralgia as the real factor in the production of pain in the fingers.

Case No. 58.—Man, aged thirty-nine, a factory worker. Periarticular fibrositis of the left shoulder with pain and limitation of motion. Treatment by brachial block after the manner of Kupperman[10] or Judovich and Bates[9] resulted in approximately 90 per cent elimination of pain. Two weeks after wearing corrective shoes all of the pain in the shoulder had disappeared.

Remarks: Faulty body mechanics was a factor in production of pain and responded to correction. It may have initiated the shoulder pains originally which, with protective spasm, may have resulted in periarticular fibrositis.

Discussion

Many obscure symptoms which ordinarily defy a straightforward diagnosis and treatment are often connected with the disease entities which are the subject of this discourse and which in turn respond to the therapeutic regime outlined. Thus, as an example, the vexing problem of the patient with irritation of cervical nerve roots can become greatly simplified. Here it is that the complaints of numbness, tingling, burning of the hand, and weakness with inability to hold things should bring on a rheumatic association. One may well postulate that if the symptom suggests a nerve involvement, the possibility of a rheumatic state should be thoroughly explored.

The physiology of body mechanics, as described by Jones and elaborated here, appears to be structurally desirable and understandable. The faults are present throughout the weight bearing joints rather than in one particular region. Greater stress or irritation in one or more locations explains the reason for persistent painful symptoms in those regions, or those supplied by the segmental nerves when these are involved. The symptoms are relative for the particular patient under consideration; for the same degree of pronation may not be associated with any symptoms in another individual. One does not abstract a single region for consideration without including the entire musculoskeletal system. As an example, one often hears references made to "lordosis" as a distinct entity, whereas it is only one link in the chain of serial reactions which may be produced by pronation. Usually, in a case such as this, treatment is employed which concentrates mainly on the lumbrosacral region, which, when satisfactory, is often due to inordinate attention and effort at the clinic or on the part of the patient himself.

The relativity of the abnormalities produced is shown in the case of symptomatic lordosis. An angle (Fig. 2) coincident with pain in one patient may be much smaller than a much larger angle in another patient who has no pain at all. And yet we have found that in correction the angle is usually smaller than before correction. Thus, the change is relative for the individual under consideration and has little connection with other individuals.

The chief value of the present discussion lies in the possibility of giving relief to a larger number of patients than obtains under today's methods of treatment. It depends upon a refinement in existing techniques of correction of faulty body mechanics which is applicable to a large mass of rheumatic patients. This is due to the recognition given, aside from imbalance owing to a shortened extremity, to one very important and basic factor which affects most weight bearing joints and their surrounding tissues. The changes from the normal physiology explain many painful states in the musculoskeletal system and such knowledge eliminates the necessity for searching for regions of "stress and tension" as separate entities.

An additional value rests in the directness with which the problem is attacked and the relation this may have on studies in which body mechanics is considered to be a factor.

(Continued on Page 1077)

17-Ketosteroid Excretion in Rheumatoid Arthritis

By Hugo A. Freund, A.B., M.D., Daniel H. Basinski, Ph.D., and R. Bruce Scott, M.S.

Detroit, Michigan

IN THE pre-cortisone days of rheumatoid arthritis treatment evidence was slowly gathering to indicate that somewhere the endocrine system was involved. One of the most suggestive pieces of evidence was that clarified by Hench and his coworkers in their work on the remission of symptoms of arthritis during pregnancy. Prior to his study considerable confusion existed as to the actual relation of pregnancy to the disease, partly because of the occurrence of an aggravation of symptoms in some individuals during pregnancy. The obvious step, the administration of sex hormones, was shown to be valueless by a number of workers.

The well-documented effect of jaundice in relieving rheumatoid arthritis was suggestive of a steroid involvement (possibly via bile-steroid compounds). With these two leads in mind, we considered a study of steroid metabolism to be in order. After considerable thought we decided on a study of 17-ketosteroid excretion in the urine. The 17-ketosteroids represent the end-products of metabolism of a considerable group of steroid compounds, produced largely by the adrenal cortex and to a small extent by the testes. Our original purpose was to carry out a rapid survey by means of a relatively uninvolved procedure. The chemical method, based on the Zimmerman reaction is by no means specific for one compound, or even a small group of compounds. The 3- and 20-ketosteroids also produce a color in the sensitive range. However, these compounds also arise from the adrenal steroids and are thus a further reflection of adrenal cortical output. The interfering chromogens which appear in the urine can be corrected for by appropriate spectrophotometric manipulation.[3]

Our present phase of the rheumatoid arthritis research was begun in late 1947 and includes the work reported here, in addition to other studies which will be published elsewhere.

This investigation was carried out at the Research Laboratory, Children's Fund of Michigan, Detroit, Michigan.

TABLE I. 17-KETOSTEROID EXCRETIONS
Values in mg. per 24 hours

	Male		Female	
	Arthritic	Normal	Arthritic	Normal
No. of individuals	3	6	18	12
Mean	5.5	9.9	4.6	9.7
Standard deviation	1.4	2.3	1.6	4.5

The determinations of 17-ketosteroid output of the arthritic patients were carried out on 24-hour urine specimens which were collected during the entire period of hospitalization, usually a minimum of ten days. This hospitalization was undertaken in order to insure quantitative collection of specimens for this and other studies, and to have all of the patients at approximately the same level of activity. The values obtained were thus verified and represent a true average excretion under the conditions defined.

As a control, the same determinations were performed on urine specimens from a group of healthy, normal individuals, all laboratory or office workers carrying out their usual duties. Most of the determinations were on single 24-hour collections, but a sufficient number of collections were repeated to convince us that the results were valid.

The data are briefly summarized in Table I, from which it can be seen that the differences between the two groups are striking. There are an insufficient number of males represented for absolute assurance, but the difference between normal and arthritic females has a very high statistical significance.

For both males and females the mean values are approximately twice as high for the normals as for the arthritics. The possibility that our technique is faulty is minimized by the fact that our normal values correspond very closely to the generally accepted average values for normals from many other laboratories. The observed facts are as correct as present-day laboratory methods can ascertain them. The explanation of these observations is, however, a greater problem.

One is inclined, at first glance, to attribute the low excretion values in arthritics to a simple lack of 17-hydroxy 11-dehydrocorticosterone (cortisone) production by the adrenal cortex. Several factors, however, rule against such an easy explanation. The excretion of 17-ketosteroids in animal experiments accounts for only 5 to 10 per cent of the administered cortisone as urinary metabolites.[1] In subsequent experiments we have observed no detectable rise in ketosteroid excretion in human

arthritic subjects receiving large amounts of cortisone. If the anabolic pathway of cortisone metabolism is largely through some mechanism other than the formation of 17-ketosteroids, one cannot expect to find an index to its rate of production and utilization by a determination of such steroids in the urine. It is apparent then, that the low values for ketosteroids in the urine must be explained on some basis other than that of a lack of one specific steroid, namely, cortisone.

If the degree of physical activity of the individual has an influence on the level of functioning of the adrenal cortex, then one might expect a result such as we have found. Arthritic patients are certainly, of painful necessity, a sedentary group. It is conceivable that the low excretion of 17-ketosteroids is merely a reflection of this diminished physical activity. It is our intention to carry out suitable control studies in the near future to test this possibility. The problem of getting the proper controls is not a simple one.

In Addison's disease, one of the manifestations of adrenal cortical malfunctioning is a disturbance of mineral metabolism. Plasma sodium is lost and potassium increased. A lowered 17-ketosteroid excretion is further indicative of diminished adrenal cortical activity. In nine of our female patients, plasma sodium and potassium determinations were made and found to be within normal limits. An average of sixteen determinations of sodium showed a value of 313 mg. per 100 ml. The average of fifteen potassium determinations was 20.5 mg. per 100 ml. of plasma. Some analyses of urinary sodium and potassium were made and, although they were not closely controlled and elaborate balance studies, they clearly indicated that excretion of these cations was well within normal limits. It is evident, then, that the failure of the adrenal cortex, if that is the primary difficulty, is not a failure of all functions of the gland, but a limited and perhaps quite specific failure.

According to Selye[2] rheumatic diseases might be explained in terms of his General Adaptation Syndrome by assuming an elaboration of excessive amounts of mineralo-corticoid hormone whenever an affected individual is exposed to any agent capable of producing an "alarm reaction." This is on the basis of his animal experiments in which acute joint lesions tend to occur in animals receiving excessive amounts of mineralo-corticoids. He states, "This suggested that the so-called cryptogenic rheumatic diseases may likewise represent diseases of adaptation due to endogenous corticoid intoxication."

However, it is difficult to reconcile an increased production of a substance with a diminished output of corresponding metabolites, unless one assumes a failure to produce one group of hormones with a consequent increase in the *relative* amount of the hormones presumed to have a damaging effect. It is obvious that an enormous amount of work remains to be done to reconcile the observed facts with the theoretical proposals made so far.

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OSTEOARTHRITIS AND BODY MECHANICS

(Continued from Page 1075)

Summary

1. Confirmation is presented of Laurence Jones' work on low backache and various neuralgias.
2. It has been shown that many of the symptoms associated with arthritis are measurably due to faulty body mechanics, and
3. That these symptoms are reversible by correction of faulty body mechanics, and
4. That this in turn is accomplished by correction of faulty foot posture.
5. Ideal foot posture is maintained by wearing specially prepared supportive shoes.
6. In the general treatment of osteoarthritis and fibrositis the combination of routine medical and physical therapy, for irritative changes, with correction of faulty foot posture leads to a symptomatic response superior to that which is ordinarily obtained.

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The Hands in Arthritis

By Dwight C. Ensign, M.D.,
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THE HANDS of many arthritic patients have a story to tell. It is becoming more important that all physicians be able to read and understand this story, since satisfactory treatment of some forms of arthritis is already available, with the promise that even better therapy for the rheumatoid variety will soon result from current investigation of some hormonal effects. It is now, more than ever, of great importance that every patient with rheumatoid arthritis be recognized as soon as possible and be given a comprehensive program of treatment. In this way deformities may be prevented or minimized, and the patient may be maintained in the best possible condition while awaiting more definitive treatment.

It is the purpose of this paper, not to discuss the treatment of arthritis, but rather to call attention to manifestations of various forms of the disease as shown in the hands, together with some non-arthritic changes which may be confusing. No reference is made to x-ray changes or to arthritic involvement elsewhere. Emphasis is directed only to those features which may be observed by inspection of the hands, in the hope that interest, so aroused, may lead to more complete study and subsequent treatment of the patient whose hands are noticed to be affected.

Rheumatoid Arthritis

Rheumatoid (atrophic) arthritis often begins in the small joints of the hands, most frequently in the proximal interphalangeal joints, with the development of typical spindle-shaped swellings of the soft tissues as illustrated in Figure 1. Later, the metacarpo-phalangeal joints and the wrists may be affected (Fig. 2). Symmetrical involvement is the rule. The hands are characteristically cold and clammy, occasionally warm and moist with reddening of the palms especially in the thenar and hypothenar areas. Weakness of grip is often an early finding. Atrophy of intrinsic muscles may become striking (Fig. 3), and as the disease progresses, tendon sheath swellings may occur (Fig. 3). Increasing deformity with flexion contractures, absorption of bone near joints, and lateral or ulnar deflection of the digits characterize advanced rheumatoid arthritis (Figs. 4, 5).

Rheumatoid nodules develop in from 5 to 25 per cent of the cases. These may be found in the subcutaneous tissue of any region of the body where bony prominences are near the surface; pressure and trauma play a part in localization. In the hands, these nodules often occur over joints showing flexion contractures (Fig. 6). The nodules may be sensitive to pressure but usually are not painful. Some of them are very superficial and may ulcerate; others may be deeper, attached to periosteum or to tendons. They are persistent, although they may vary in size over a long period and occasionally regress or disappear entirely. In some instances of advanced rheumatoid disease the number of subcutaneous nodules may become enormous (Fig. 7).

Degenerative Joint Disease

Heberden's nodes are the chief indications in the hands of degenerative joint disease (osteoarthritis, hypertrophic arthritis). The original account by Heberden in 1782, quoted below, is still as accurate a description as any which have been written subsequently:

"Digitorum Nodi"

"What are those little hard knobs, about the size of a small pea, which are frequently seen upon the fingers, particularly a little below the top, near the joint? They have no connexion with the gout, being found in persons who never had it; they continue for life; and being hardly ever attended with pain, or disposed to become sores, are rather unsightly, than inconvenient, though they must be some little hindrance to the free use of the fingers."

It may be added that occasionally the affected joints do become reddened and tender or even painful, usually as a result of trauma.

Two types of involvement may be noted, traumatic and so-called idiopathic. The traumatic type is distinguishable clinically only by history. A single joint may be affected, as in the "baseball finger." In the idiopathic type, which is a manifestation of generalized degenerative joint disease, most or all of the fingers show the characteristic nodes at the terminal interphalangeal joints (Fig. 8). Sometimes, especially in people who have done strenuous work with the hands, similar osteo-

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Fig. 1. Early rheumatoid arthritis, with spindle-shaped swelling of proximal interphalangeal joint of right middle finger and left ring finger.

Fig. 2. More advanced rheumatoid arthritis, with involvement of proximal interphalangeal and metacarpo-phalangeal joints.

Fig. 3. Rheumatoid arthritis, showing interosseous atrophy and tenosynovitis.

Fig. 4. Advanced rheumatoid arthritis.

Fig. 5. Advanced rheumatoid arthritis.

Fig. 6. Rheumatoid nodules.

Fig. 7. Rheumatoid nodules.

Fig. 8. Degenerative joint disease (osteoarthritis) showing Heberden's nodes at terminal interphalangeal joints.

Fig. 9. Degenerative joint disease involving both terminal and proximal interphalangeal joints.

Fig. 10. Synovial cyst.

Fig. 11. Gout. Chronic tophaceous changes, most marked at terminal interphalangeal joint of right index finger; acute gouty arthritis at proximal interphalangeal joint of left middle finger and left wrist.

Fig. 12. Gout. Advanced tophaceous involvement of thumb, index and middle fingers; little finger amputated because of disabling tophus formation.

arthritic changes occur also at the proximal interphalangeal joints (Fig. 9) where they may be spoken of as "Bouchard's nodes." The enlargement here is hard and bony in consistency as contrasted to the soft-tissue character of the spindling at these articulations in rheumatoid arthritis. It should be mentioned that both osteoarthritic and rheumatoid changes may be present in the same individual, particularly in the later decades.

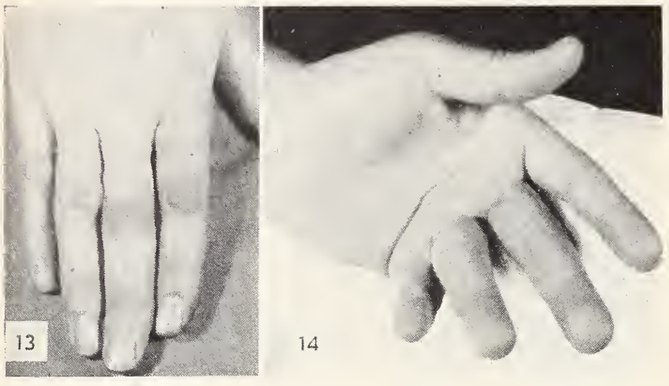

Fig. 13. Knuckle pads. Fig. 14. Dupuytren's contracture.

Another lesion occasionally seen at the terminal interphalangeal joint is the synovial cyst. This is sometimes a precursor of the Heberden's node, and sometimes occurs in patients who already have these evidences of degenerative joint disease. The cyst is filled with clear or opalescent gelatinous or mucoid material and may communicate with the synovial space of the terminal interphalangeal joint or may be independent of it. They are lined with synovial cells (Fig. 10).

Gouty Arthritis

Acute gouty arthritis may involve any of the joints of the hands; only 60 per cent of patients with gout have their initial arthritic attack in the feet. In acute gouty arthritis the affected joint is dusky red, hot, swollen, and exquisitely tender (Fig. 11, left middle finger). Joints which have been the site of repeated acute attacks ultimately develop chronic changes, resulting from tophi and hypertrophic changes in the bones (Fig. 11, right index finger). Asymmetrical involvement is the rule. In individuals with long standing disease, striking deformities and enlargements may occur; tophi may ulcerate, and extensive involvement may necessitate amputation of the affected digit (Fig. 12).

Knuckle Pads

Knuckle pads (Fig. 13) are rather uncommonly seen; they are located over the dorsal aspect of proximal interphalangeal joints and at first glance may suggest rheumatoid arthritis. However, these pads bear no relationship to joint disease. They are usually asymptomatic and interfere only slightly if at all with flexion of the fingers. They may occur in early life, or occasionally past middle age, and there is usually no occupational etiology. There may be some kinship with Dupuytren's contracture, inasmuch as both types of lesions appear in some individuals.

Dupuytren's Contracture

Dupuytren's contracture (Fig. 14) results from a progressive thickening of the palmar fascia which, as it contracts, pulls the fingers into flexion toward the palm of the hand, associated with puckering of the skin of the palm. Nodular thickening in the palm is apparent. The ring finger is most commonly involved, next the little finger, then the middle finger and then the index finger. The thumb is seldom affected. In early cases the nodular thickening of the palmar fascia may resemble a subcutaneous nodule of rheumatoid arthritis, but the joints themselves are not involved. The condition is often misdiagnosed as arthritis.

Conclusion

This brief and superficial description of some of the manifestations of arthritis in the hands is presented in the hope that it may arouse interest in a group of diseases frequently neglected in their early stages. Each time a physician sees a patient, he sees that patient's hands. If those hands suggest that arthritis is present, prompt and thorough follow-up may spare the individual much suffering and disability.

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Medicine will flourish and progress only in a sound economy. Our efforts, therefore, must concern not only the interests of good medicine but also the maintenance of free enterprise and solvent finance in American life. We must labor to maintain the personal freedom and initiative of our citizens. Our funds then will be available to help the needy and improve the conditions of other citizens by local measures; citizens will not lose their initiative and sense of personal responsibility to the state. In this national emergency, whether physicians or business men or farmers or laboring men, we must not be guilty of cowardice or unwillingness to stand up and be counted. We shall have to oppose even some of our medical friends who have been deceived by the rosy red picture of the welfare state.—Address, A.M.A. President E. E. Irons.

Procaine in Rheumatic Diseases

By Ezra Lipkin, M.D.
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IN THE LIGHT of cortisone and ACTH, it would appear that any other agency in the treatment of rheumatic disease would fall short of its goal. But, dramatic though their effect may be, in the field of the rheumatic diseases the use of cortisone and ACTH is strictly limited to the rheumatoid type of arthritis; and as long as discontinuance of their use results in a return of the original symptoms, they cannot be considered, at this stage, as a solution to even this form of arthritis. Hence, other agents that have been found useful in the treatment of rheumatic disease must not be abandoned, but, on the contrary, find their rightful place in our therapeutic armamentarium. Of such agents, procaine is an eminent example. Its use is not confined to any particular type of arthritis. It finds broad application in all types of "rheumatism"—whether arthritis, fibrositis, bursitis or neuritis—wherever pain and disability manifest themselves, particularly of a local character.

The use of procaine in rheumatic disease came to our attention in 1939, with the receipt of a reprint on "Local Injections and Regional Analgesia with Procaine Solutions for Intractable Pain in Chronic Arthritis and Related Conditions" by Dr. Otto Steinbrocker, of New York.* Since the introduction of procaine in the Arthritis Department of the North End Clinic, thousands of injections have been given, and the fact that it is still being used speaks for its efficacy in properly selected cases. Procaine alleviates pain, shortens the period of disability, and not infrequently precludes the need for surgery and the application of casts.

We shall not burden the reader with bibliographical data. These are available in Dr. Steinbrocker's book, published by W. B. Saunders, in 1941. The use of procaine is becoming more popular as physicians become familiar with its value and the technique of its application.

To anticipate the most common argument offered against its use: procaine is *not* merely an anaesthetic agent whose transient effects disappear with the cessation of the medication. Its value lies in its *analgesic* effect, which is often prolonged, and for its relaxing effect on spastic muscles. A so-called "frozen" shoulder, for example, held down by spastic muscles and ligaments, is relieved of its spasm when the painful impulses of the sensory nerves are abolished. Motion is restored, and disability, as well as atrophy of disuse, is thus prevented. Consequently, procaine fulfills other functions besides anesthesia. While procaine does not attack the problem of "rheumatism" etiologically, it subserves a therapeutic function which in many instances may be equivalent to a "cure." For, in the long run, the patient is less concerned with the etiology of his condition than with its outcome. Besides, the causative factor in many rheumatic conditions is frequently not in evidence, and even now the medical profession is revising its concept of the etiology of rheumatoid arthritis, which has heretofore been regarded infectious in nature.

The indication for procaine injection is pain in the skeletal structures, with or without limitation in motion, in areas preferably well defined and localized; e.g., bursitis of the shoulder, lumbago, sacroiliac strain, et cetera. The contraindications are: widespread involvement of the disease, acute inflammatory areas, advanced diabetes or cardiac disease, general debility, psychoneurosis, and known procaine sensitivity.

The chief hazards in the use of procaine are its accidental introduction into the circulation, and the puncture of the dome of the pleura in brachial block. The former can be prevented by repeated aspiration, and the latter by not advancing the needle beyond the first rib. The puncture of the pleura is signalized by a sudden sharp pain in the chest and cough. These symptoms can be controlled by codeine, and the artificial pneumothorax does not cause permanent ill effects.

Procaine reaction consists of dizziness and weakness, which are transient in character. No special treatment is required.

Procaine sensitivity, manifested by pallor, nausea, sweating, and occasional fainting is treated by intravenous injection of a barbiturate. The preliminary administration of a 1½ grain barbiturate capsule forestalls severe procaine reactions due to drug sensitivity.

The materials used are the usual 2 c.c., 10 c.c. and 20 c.c. glass syringes, and an assortment of needles, 22-gauge, from a small subcutaneous to a

*Dr. Steinbrocker has recently been elected president of the American Rheumatism Association, and is the author of an excellent text on "Arthritis in Modern Practice."

5-inch long needle for various depths of penetration. For fibrositis a 2 to 3 inch needle is used, for brachial block a 2½ inch needle, and for sciatic injection a 4 to 5 inch needle, depending upon the weight of the patient.

The dosage varies between 5 and 30 c.c., and the concentration used is generally a 1 per cent aqueous solution, although a 2 per cent solution is sometimes used where the total amount injected is small. Occasionally, for a more prolonged effect of the anaesthetic, a 2 per cent solution of procaine in oil is used, from 2 to 5 c.c., never in brachial block. For intramuscular injection in fibrositis, the usual amount is 10 c.c., for brachial block 10 to 15 c.c., for sciatic neuritis 20 c.c. of 1 per cent procaine, which may be followed by 60 c.c. saline. The number of injections varies with the condition and the response. The interval is usually semi-weekly or weekly, although in severe cases daily injections may have to be given. As the condition improves, the interval is lengthened.

The types of injection are local and regional. Local injections are given in tender spots at the maximum site of pain as elicited by deep pressure in such areas as the sternocleidomastoid (wry neck), in the cervical and dorsolumbar area (in hypertrophic arthritis), in the sacroiliac region (for sprain or arthritis of the sacroiliac joint), in the lumbar muscle area (for lumbago), in the sacrococcygeal region, as well as in tender spots over the shoulder (in arthritis, bursitis, subscapular fibrositis), the knees, elbows, or ankle joints. After preliminary skin anesthesia, the tender points are infiltrated with 5 to 20 c.c. procaine, and gently massaged for a few moments.

Brachial plexus block is used for painful shoulder conditions, whether due to arthritis, periarthritis, subdeltoid bursitis—with or without calcification—and brachial neuralgia, secondary to hypertrophic arthritis of the cervical spine. The technique of brachial block is more exacting than that, say, for fibrositis. Failure to adequately infiltrate the brachial plexus will result in disappointment for both patient and physician. Frequent practice is necessary to locate the brachial plexus, and infiltrate it without undue trauma to the surrounding tissues. The injection is given only when the patient signals a lightning-like shock when the nerve is touched by the approaching needle. To find this point, the operator seats himself opposite the patient, facing the shoulder to be injected. The midpoint of the clavicle is found halfway between the sternoclavicular and acromioclavicular articulations and marked with mercurochrome. One to two centimeters above this midpoint, a subcutaneous wheal is made with 1 per cent procaine, and the needle inserted, in a direction downward, inward and backward toward the first rib. At a depth usually between 2 and 3 cm., even before the rib is encountered, the patient may experience the lightning-like sensation above mentioned. This is the point to be injected, after aspiration. The first rib serves as a landmark, below which lies the dome of the pleura. The needle should, therefore, not advance below this rib. When the injection has been properly made, the patient should experience a feeling of numbness and heaviness in the arm, which persist for about two hours. The arm also feels warm, and assumes a somewhat dusky appearance. Passive and active motion are immediately begun in the injected arm, to break up adhesions and increase the range of motion—usually abduction and external rotation—which were limited to a greater or lesser degree. The patient is instructed to continue exercising the arm until the following visit, when the injection is repeated.

Injection of the sacroiliac joint is relatively simple. At the site of greatest tenderness over the joint, a subcutaneous wheal is made, the needle is thrust perpendicularly downward until bone is encountered, and between 5 and 10 c.c. procaine is deposited. The needle is then partly withdrawn and directed upward, where a similar amount is injected. Lastly, the needle is again partly withdrawn and directed downward, and 5 to 10 c.c. deposited. Thus, from 15 to 30 c.c. 1 per cent procaine is injected in a fan-shaped manner over the entire surface of the sacroiliac joint. The results are more often than not extremely gratifying.

Injection for Sciatica

Pain along the sciatic nerve distribution may be the result of a true or primary sciatic neuritis, or of a referred or secondary sciatic neuralgia. The differentiation is necessary for proper treatment of this condition.

Primary sciatic neuritis originates from pathology anywhere within the nerve substance. Such pathologic changes may occur at the origin of the nerve within the spinal cord, in the nerve roots, or along the nerve trunk. Involvement of the cord or the nerve roots by infection, neoplasm and dis-

placed or enlarged spinal structures, as well as by fibrositis or hypertrophic arthritis of the intervertebral foramina may produce direct nerve pain that should be treated by direct nerve block.

Referred, or secondary, sciatic neuralgia originates outside the nerve, and is transmitted through a reflex mechanism along the sciatic distribution. Such pain constitutes the frequent discomfort along the lower extremity diagnosed as sciatica. It usually originates in disturbances of the ligaments and supportive structures of the low back. Careful examination of the back elicits points of tenderness, the so-called "trigger points," pressure upon which may provoke the typical local and referred pain complained of, as the painful stimuli are transmitted along the local nerve supply (the posterior divisions of the spinal nerves) to produce referred sciatic pain. When the needle enters the "trigger point," the local and referred pain are momentarily increased, but following procaine injection the pain is abolished in both places. The treatment for this type of sciatic neuralgia consists of repeated injections of 10 to 15 c.c. procaine into the "trigger points."

Sciatic Nerve Block

Technique of injection: The patient is placed in a prone or Sim's position. The point of injection is located by palpating the upper extremity of the greater trochanter of the femur and the posterosuperior iliac spine. A line is drawn between these points (iliotrochanteric line), and from the midpoint of this line a perpendicular is drawn downward and inward for 3 cm. This point marks the site of puncture for the great sciatic nerve. A wheal is raised, and a 4 to 5 inch needle is inserted through this point and advanced until a sudden lightning pain is felt by the patient, radiating down to the toes. Twenty c.c. 1 per cent procaine is injected at this point. This may be followed by an additional injection of 60 c.c. saline, to break up any possible adhesions within the nerve sheath. In a satisfactory injection the leg becomes temporarily "paralyzed" for about twenty to thirty minutes, at the end of which time the patient is permitted to go home.

Summary and Conclusion

Procaine hydrochloride, in a 1 to 2 per cent aqueous solution, has been used at the North End Clinic and in our private practice over a period of eleven years in selected cases of arthritis, fibrositis, bursitis and neuritis—brachial and sciatic. The results have been generally satisfactory, and have justified its continued use. While procaine is not offered as a "cure" for rheumatism, it is a most helpful adjunct to the more generally accepted methods of coping with this group of diseases, and has at times—when other methods have failed—offered the only prompt and definite relief available. Its mechanism is simple and easily understandable. Procaine paralyzes the sensory nerve endings. By interrupting the sensory nerve impulses, procaine stops pain, relaxes muscle spasm, permits increased motion in the affected part, prevents atrophy of disuse and circulatory impairment, and shortens disability. Repeated injections raise the threshold of pain, and produce a state of analgesia, thus permitting the restoration of function, and the early return of the afflicted individual to his accustomed tasks.

4836 Michigan Avenue

MSMS

CONCURRENT ADMINISTRATION OF ACTH AND COLCHICINE

(Continued from Page 1064)

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The Hemagglutination Test for Rheumatoid Arthritis

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IT HAS BEEN the experience of several investigators that serum from patients with rheumatoid arthritis contains a factor which causes the agglutination of sheep erythrocytes in the presence of small quantities of sheep cell antibody. In the earlier investigations, this phenomenon was not considered to be specific for rheumatoid arthritis because the reaction did not occur consistently. More recently, however, it has been shown that the sera of patients suffering from rheumatoid arthritis agglutinated sensitized sheep cells to a higher titer than sheep cells unsensitized with homologous antibody.[5] The difference in the titers was expressed as a differential titer and it was the experience of several workers that a differential titer of 16 or greater was indicative of active or inactive rheumatoid arthritis, whereas differential titers lower than 16 were considered to be non-specific. Thus, one study[5] demonstrated that all of twenty-seven patients with active rheumatoid arthritis exhibited differential titers of 16 or greater, as did eight of sixteen patients with inactive rheumatoid arthritis.

Other investigators,[2,3,4] using the differential titer as an indicator of arthritic activity, obtained variable results. A summary of their observations revealed that forty-one out of seventy-three, seven out of twenty-one, and seven out of twenty patients with marked rheumatoid activity yielded differential titers of less than 16. The latter two series are exclusive of cases of mild or moderate severity.

A more recent report,[1] however, has indicated that if certain non-specific hemagglutinins are first removed from arthritic sera, it is unnecessary to express the results in differential titers, since unsensitized cells would not be agglutinated by arthritic sera and, conversely, sensitized cells were seldom agglutinated by non-arthritic sera. Thus in one series, the sera of thirty-five out of thirty-nine cases of active peripheral rheumatoid arthritis specifically agglutinated sensitized sheep erythrocytes.

In view of the earlier variable results, and the more promising observations with the modified test, it was of interest to us to further investigate the diagnostic possibilities of the latter in rheumatoid arthritis. The modified test follows a simplified procedure. Properly prepared sheep erythrocytes are sensitized with sheep cell antibody in quantities insufficient to cause agglutination. When sera of patients with rheumatoid arthritis are treated to remove non-specific agglutinins and then are placed in the presence of the sensitized cells, a marked agglutination of the cells occurs.

TABLE I. TITERS OF HEMAGGLUTININS IN RHEUMATOID ARTHRITIS SERA

Hemagglutinin titer	80	160	320	640	1280	2560	5120
Number of patients	3	7	2	5	2	1	2

We have been able to study twenty-two cases of clinically active rheumatoid arthritis. These were all severe cases as evidenced by joint changes. All of these sera exhibited an agglutination of sensitized sheep erythrocytes in titers of 1:80 or higher. The range of the titers is shown in Table I.

In a control series we were able to study the sera of seventy normal individuals and non-arthritic patients. Of these, sixty-seven did not agglutinate the cells at all, while three exhibited a low hemagglutination titer of 1:20. This negative group included one acute rheumatic fever and one case of acute disseminated lupus erythematosis.

Since early joint pain in a patient is often a difficult diagnostic problem, the various workers concerned with the sheep cell agglutination test have given particular attention to inactive cases, to mild active cases and to presumptive cases without joint involvement. Their results were essentially negative, that is, either the differential titer was low in most cases, or in the modified test no titer at all was obtained. Although we have only been able to study one mild case with x-ray evidence of beginning joint changes and one presumptive case with no joint change, we have obtained results consistent with those previously reported, the former yielding a titer of 1:10 and the latter appearing negative. Thus it appears that the hemagglutination test may be of limited value where clinical diagnosis of early or mild cases is uncertain. Further investigation of such cases is therefore necessary.

It is also of primary interest to study the fundamental nature of the factors found in arthritic sera that appear to activate the agglutination of sensitized sheep cells. Others[1,4] have shown that the

(Continued on Page 1126)

This investigation was carried out at the Virus Laboratory, Children's Fund of Michigan, Detroit, Michigan.

Cortisone in Rheumatoid Arthritis

Observations of Fifteen Patients

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OUR EXPERIENCE with cortisone therapy in fifteen patients with rheumatoid arthritis extends over a period of eight months. During this time we have had opportunity to observe the remarkable though unenduring effect of this new agent and have developed a procedure whereby remission may be maintained on a minimal dosage level without significant complications.

The group consisted of eleven females and four males ranging in age from twenty-six to fifty-three years. All had multiple joint involvement of several years' standing and had had a wide variety of treatment with varying response. Before beginning treatment, numerous laboratory studies were made, consisting of daily sedimentation rates, urinary 17-ketosteroids and 11-oxysteroids, glucose tolerance, blood uric acid, sodium and potassium levels and eosinophile counts. The first two patients had, in addition, determinations of the blood glutathione, alkaline and acid phosphatase, calcium and phosphorus and serum protein, albumin and globulin.

The first patient was started on a dose of 100 mg. cortisone twice daily for two days, 100 mg. once daily for the next seven days and 50 mg. daily for another eleven days. Improvement appeared by the second day with a sense of well-being and "loosening" of the joints. This was followed by gradual disappearance of pain, stiffness and swelling. Within three days after cessation of therapy, symptoms started to reappear, and within a week the joint involvement had returned to its pretreatment status. A total of 1.75 grams cortisone had been given in twenty days.

The second patient was given 100 mg. on the first day, 200 mg. the second day and 100 mg. daily for the next six days. Fifty mg. daily was then given for the next ten days. Joint stiffness relaxed at the end of the first twenty-four hours and increasing euphoria, improved appetite, reduced joint swelling with greater mobility appeared gradually as treatment continued. Almost complete relapse occurred within a week after stopping treatment. This patient had received 1.4 gm. cortisone in eighteen days.

The next two patients, women aged forty-eight and fifty, presented histories, clinical findings and treatment experiences that were practically identical. Both were started with a 300 mg. injection of cortisone on the first day and continued on 100 mg. daily for the next fourteen days. This was reduced to 100 mg. on alternate days during the following ten days. Two 500 mg. pellets of cortisone were then implanted in each patient under the skin near the scapula four days before discharge. Exclusive of the pellets, each patient had had a total of 1.9 gm. cortisone over a period of twenty-nine days.

Each patient had noted improvement within twelve hours after the first injection. This increased daily with notable euphoria, increased appetite and restfulness and reduction in joint swelling with improved mobility. One of the patients developed a troublesome subluxation of the left ring finger at the metacarpo-phalangeal joint because the reduced swelling had eliminated the effective splinting of an eburnated, widened joint space.

Within a week after cessation of treatment both patients lost their euphoria as the former pain and disability gradually returned. In another two weeks there was complete relapse. Both were restarted on 100 mg. cortisone three times weekly and improvement began almost at once. After two weeks the dose was reduced to 75 mg. three times weekly and in two weeks it was further reduced to 100 mg. twice weekly. At this level there was some return of joint tenderness and swelling so the dose was increased to 150 mg. with considerable and continuing improvement.

During their hospital stay both patients had been given diets with a salt content less than one gram. Through misunderstanding, one of the patients failed to observe this salt restriction and developed marked swelling of the face, hands and legs during the fourth week after discharge, when the cortisone injections had been resumed. Restriction of salt and administration of 20 grains potassium citrate in water with each meal promptly eliminated the edema and it has not returned since. Following this and a similar experience with four other patients, potassium citrate was pre-

From the Research Division, Harper Hospital.

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TABLE I. SEDIMENTATION RATES

Patient	Initial Rate	Rates during treatment
M.F. #45490	43	45-43-50-41-37-42-38-43-39-35-25-21-15.
M.O. #57790	32	45-40-36-50-41-28-34-36-32-36-19-36-26-28-25.
D.R. #73138	48	43-34-41-35-25-37-34-42-36.
L.B. #11136	33	43-38-41-32-40-47-40-25-38-41-40-38-41-47-55-42.
B.S. #74656	46	43-48-49-46-36-37-12-28-41.
R.F. #80340	36	28.
M.T. #80421	20	24.
P.S. #78351	42	41-39-34.
E.E. #77640	80	17-6.
J.F. #76078	20	16-5-17-13.
E.L. #75252	18	15-31-19-12-5-15.
W.A. #79678	16	31.
H.S. #79729	36	36.

TABLE II. URINARY 17-KETOSTEROIDS AND 11-OXYSTEROIDS

Patient		17-Ks	11-Os
D.R. #73138	4/3	8.7	1.10
	4/14	6.9	1.07
	4/25	1.2	1.94
L.B. #11136	4/3	3.7	0.56
	4/14	3.2	1.23
	4/25	3.5	1.22
	5/19	1.7	0.95
B.S. #74656	5/2	4.5	0.23
	5/12	5.0	1.46
	6/8	2.8	2.34
P.S. #78351	6/23	1.25	6.9
E.E. #77640	6/6	1.05	5.1
J.F. ♂ #76078	5/11	18.2	1.52
	6/8	15.8	1.38
	6/15	14.7	1.36
E.L. ♂ #75252	5/2	6.4	1.23
	5/26	17.0	1.15
	6/8	6.5	1.10

scribed for all patients on cortisone therapy in addition to a low salt diet.

The next patient, an unmarried woman, aged fifty-three, developed arthritis involving all the phalanges, the wrists, elbows, shoulders and knees only nine months before admission. Because the disability first appeared along with menopausal symptoms, approximately three months before menses stopped, it was decided to try estrogenic therapy first. She was given 5 mg. stilbestrol the first day, 10 mg. the second, 15 mg. daily from then on. The drug was well tolerated and during the next three weeks there was some pain relief with reduced stiffness and increased mobility. Since there was still considerable disability, a 300 mg. injection of cortisone was given and this was followed with 100 mg. daily for the next eight days. Improvement occurred almost immediately and by the end of the ninth day when cortisone was discontinued, all joint swelling had disappeared, mobility was normal and she was discharged, continuing with 15 mg. stilbestrol daily. No relapse has occurred and the stilbestrol was discontinued after the ninth week. Remission has now been maintained for eleven weeks. The salt-poor diet and the potassium citrate were discontinued after the hospital stay.

The remaining six female patients were thirty-one, thirty-five, thirty-nine, thirty-eight, forty-two and fifty-three years of age and had had arthritis for twelve, fourteen, four, fourteen, six and thirty years, respectively. Treatment followed much the same pattern for the first three: an initial injection of 300 mg. cortisone the first day followed by 100 mg. daily until improvement had been definitely established. The last three patients were started on 100 mg. cortisone every eight hours the first day, every twelve hours the second day and once daily thereafter. In the first group improvement followed within twenty-four hours and was quite evident by the third day. In the second group, however, there was not as pronounced improvement until at least five days had elapsed. By the eighth day all were quite euphoric, most of the pain and a good deal of the periarticular swelling had disappeared with markedly increased mobility. Two of the patients were hospitalized for longer than two weeks because their more extensive joint involvement slowed the response. (This delay was noted in patients with extensive involvement of the knees and those with mixed rheumatoid and osteoarthritis.) These patients required a total of 2.7 and 2.3 grams of cortisone, while the others had from 1.0 to 1.6 grams.

Following their discharge, all were continued on 100 mg. cortisone three times weekly for two weeks, then the dose was reduced to 75 mg. for another two weeks and further reduced to 100 mg. twice weekly. The 75 mg. dose was attended with varying degrees of relapse and with the exception of one patient who remains in remission on 100 mg. once weekly, all require at least 100 mg. twice a week for passable comfort. A minimal maintenance dose of 150 mg. twice weekly would, in our opinion, keep these patients free of pain and with few limitations on their activities.

The four male patients were twenty-six, thirty-one, thirty-six and forty years of age and had had arthritis for six, ten, one and one-half and three

years, respectively. The first two patients were hospitalized for nineteen and twenty-five days and the last two for ten days each. The total amount of cortisone administered was 1.7, 2.2, 1.4 and 1.2 grams, respectively. After discharge, the same plan of treatment was followed as with the previous group, but when a reduction to 75 mg. twice weekly was tried, all showed some degree of relapse. It was necessary to give 100 mg. twice weekly to keep these patients comfortable and active.

At present, all but one of the fifteen patients are being maintained at a comfortable level with 100 to 150 mg. twice weekly. Three of the women and two of the men developed edema when they failed to observe salt restriction. Improvement followed reduction in salt intake and administration of 20 grains potassium citrate with each meal.

Laboratory Studies

An extensive series of tests was made on the first two patients before, during and immediately after cortisone therapy. These included BMR, blood glutathione, alkaline and acid phosphatase, phosphorus, NPN, total protein, albumin, globulin, cholesterol, cholesterol esters and sodium, potassium, calcium, uric acid and ascorbic acid levels in blood and urine, as well as urinary 17-ketosteroids and 11-oxysteroids. The results were generally within the normal range so that most of the tests were not thought worthwhile for the rest of the patients.

Sedimentation rates (Westergren), as observed in thirteen of the patients, are recorded in Table I. A decrease occurred in nine, an increase in three and no change in one. The results were not as striking as those generally reported.

Blood eosinophile counts made during administration of cortisone failed to show any characteristic trend.

Urinary 17-ketosteroids and 11-oxysteroids as recorded in seven patients showed a decrease of the former in five, while the 11-oxysteroid level was increased in three and decreased in two (Table II). The results were not sufficiently impressive to warrant routine performance of these tests on all patients.

Sodium, potassium and uric acid blood levels as listed in Table III disclosed an increased sodium in eleven and a decrease in two. The potassium level was lowered in nine, increased in three and unchanged in one. (Studies were made before routine administration of potassium citrate was started.) Of the four patients in whom the blood uric acid was determined, three showed a decrease and one an increase.

The one-dose, three-hour glucose tolerance test showed decreased tolerance in nine patients, an in-

TABLE III. SODIUM, POTASSIUM AND URIC ACID (BLOOD)

Patient		Na	K	Uric Acid
M.F.	1/31	328	21.0	2.71
#45490	2/21	346	16.0	1.64
M.O.	1/31	274	24.0	2.0
#57790	2/21	304	17.0	2.3
D.R.	5/19	295	14.0	
#73138	5/29	330	12.0	
L.B.	4/3	300	13.4	3.05
#11136	5/29	337	13.0	2.95
B.S.	5/2	328	13.0	
#74656	6/9	325	15.0	
R.F.	7/10	293	12.0	
#80340	7/17	332	13.2	
M.T.	7/11	298	13.0	
#80421	7/17	308	12.1	
P.S.	6/23	270	12.0	
#78351	6/30	300	11.0	
E.E.	6/9	302	12.0	
#77640	6/30	325	9.0	
J.F.	5/16	295	13.0	4.3
#76078	6/9	312	14.0	3.3
E.L.	5/2	330	13.0	
#75252	5/16	340	11.0	
W.A.	6/30	375	13.0	
#79678	7/10	320	13.0	
H.S.	7/2	290	14.0	
#79729	7/10	303	12.0	

TABLE IV. GLUCOSE TOLERANCE

Patient		Fasting	½ hr.	1 hr.	2 hr.	3 hr.
M.F.	1/31	107	158	206	147	81
#45490	2/21	121	115	147	146	157
M.O.	1/31	69	140	116	146	86
#57790	2/21	94	152	140	132	110
D.R.	5/19	92				
#73138	5/29	96	166	197	170	107
L.B.	4/3	84				
#11136	5/29	117	175	191	197	154
B.S.	5/2	75				
#74656	6/9	109	180	191	175	122
R.F.	7/10	105	191	197	148	72
#80340	7/17-	117	250	258	....	186
M.T.	7/11	96	178	183	180	89
#80421	7/17	104	216	257	....	87
P.S.	6/23	80	153	180	166	144
#78351	6/30	107	186	194	189	159
E.E.	6/9	84	168	186	166	120
#77640	6/30	106	163	183	170	126
J.F.	5/16	109	194	173	119	78
#76078	6/9	87	180	189	146	104
E.L.	5/2	102				
#75252	5/16	122				
W.A.	6/30	104				
#79678	7/10	100	170	156	135	137
H.S.	7/2	90	150	193	64	82
#79729	7/10	100	183	246	254	117

crease in one and no change in three. None of the patients showed glycosuria (Table IV).

Of all the laboratory procedures, only two appear to have practical value in cortisone therapy. The blood sedimentation rate, while it serves as an indicator of progress made, lags behind the clinical evidence as it unfolds.

The glucose tolerance test is useful in keeping track of the carbohydrate metabolism, particularly when treatment is to be prolonged.

Summary

In our experience with cortisone therapy in fifteen patients with rheumatoid arthritis, we have found that the short course of treatment is attended by a brief remission with almost certain relapse and is best not started because of both the disappointment and the expense.

Those eligible for treatment must be prepared to remain under observation for several months. Hospitalization for the first two weeks is desirable so that daily injections may be given and essential laboratory studies carried out. After that they will require three 100 mg. injections per week for two to three weeks and from then on a maintenance schedule of two 100 mg. doses each week. Occasionally, a patient may require only 100 mg. weekly and a fortunate one will go into remission of unpredictable duration.

Implanted pellets did not keep two patients from going into relapse when injections were discontinued.

The only complication that we encountered was the development of edema in five patients who had failed to restrict their salt intake. This was promptly relieved by reducing the salt in the diet and administering potassium citrate.

Of the laboratory tests, the blood sedimentation rate and the oral glucose tolerance test were the most useful of a wide variety of studies made.

Our present procedure with the average patient after admission and the initial work-up, is to do a glucose tolerance test and determine the sodium and potassium blood levels. These are repeated at the end of the treatment course and every four weeks thereafter. A suitable diet containing less than 1 gram of salt is ordered, and on the third day of treatment 20 grains of potassium citrate is given and continued daily at each meal. A single 300 mg. dose of cortisone is injected on the first day followed by 100 mg. daily for at least ten days. For two weeks after discharge the 100 mg. injection is given three times a week, then reduced to twice weekly. Further reduction in size and frequency of the dose is then attempted as conditions may warrant.

Cortisone in its present form produces only temporary remission in rheumatoid arthritis. Its modification or supplementation with other agents will be necessary to prolong its effectiveness.

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CANCER COMMENT

(Continued from Page 1024)

request for cancer information or for a physical examination is dismissed by the physician as evidence of cancerphobia and the entire cancer educational program is branded as one that is arousing undue fears in the public mind. Such experiences arouse deserved resentment and constitute the basis for much of the criticism by laymen of some physicians' apparent lack of sympathetic interest in the cancer control problem. What such physicians fail to realize is the amount of health education to which the public has been exposed during the past few years. They applaud the good sense of the mother who insists on having her children protected against diphtheria and other communicable diseases, but regard lightly that same mother's request for self-protection against cancer by a periodic medical examination.

Cancer education, properly carried out, offers the greatest hope for reducing cancerphobia to numbers well below its present minor importance in the cancer control program. Education must not be deferred until cancer is present or the patient's mind is slanted toward the belief that it is present. It must be begun not later than the high school age so the individual approaches his adult years with their greater danger of cancer with helpful information that will cause him to know what must be done for his own protection.

Granted that a very few individuals may become unduly concerned about cancer because of the educational program, it must not be forgotten that cancerphobia never kills while untreated cancer always kills. A program of so much benefit to the many must not be weakened by catering to the few. The two per cent of neurotics must not be permitted to jeopardize the welfare of the ninety-eight per cent who will profit from constructive efforts at cancer control.

Rupture of an Endometrial Cyst During Pregnancy

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T. S. Fandrich, M.D.
Detroit, Michigan

ALL AUTHORS agree that a relative sterility exists, where endometriosis is present. Reynolds and Mac Comber[3] believe that 88 per cent of all married people are fertile. In 131 cases of endometriosis in married people, Counsellor[1] had 48 per cent relative sterility and 32.1 per cent absolute sterility. A review of the literature leads to certain other conclusions. One is impressed with the fact that endometriosis is found in the higher economic groups. Meigs[2] reports that of 400 private abdominal cases, 3 per cent had gross endometriosis, and 28 per cent had microscopic endometriosis. In 400 ward cases subjected to abdominal surgery, 8.3 per cent had gross endometriosis, and only 5.8 per cent had the condition microscopically. It is further revealed that ectopic endometrium manifests itself chiefly in the late thirties, and when found in pregnancy, is more often present in the elderly primigravida.

Endometriosis is recognized as occurring most frequently in the cul-de-sac of Douglas and its adjacent rectovaginal septum. The next most frequent site for its distribution is in the ovary. There is hardly a tissue or organ in the pelvis that escapes involvement in a fairly extensive case of endometriosis, and wherever endometrial tissue is found, one can find decidua if the patient becomes pregnant.

This report purposely is not intended to review the subject of endometriosis and pregnancy. An excellent paper on the subject has been written by Scott,[4] and any further discussion would be repetition. However, in a careful review of the literature, it was found that endometrial cysts in pregnancy either do not exist, are not diagnosed, or are not reported. Only two such cases have been found, and these are both reported by Scott.[4]

Scott's first case showed earliest symptoms during the fourth month of pregnancy, and these consisted of a transient right lower quadrant pain. About five weeks before her due date she developed a sudden, severe, sharp and non-radiating right lower abdominal pain. This acute onset followed straining at stool, following three days of constipation. The patient had some nausea but no vomiting. Observation for sixteen hours offered the possibilities of twisted ovarian cyst, acute appendicitis and degenerated myoma. Laparotomy revealed a leaking chocolate cyst of the right ovary. The baby was delivered by classical section and, because of the extent of the endometriosis, this was followed by a supravaginal hysterectomy and bilateral salpingo-oophorectomy. Convalescence was uneventful.

The second case that Scott[4] reports showed an ovarian cyst on the right discovered at the patient's first examination, when she was about two months' pregnant. Laparotomy proved the tumor to be a grape-fruit sized chocolate cyst, replacing the entire ovary. This ovary was removed, and a smaller chocolate cyst of the left ovary was resected. The postoperative course was uneventful, and the patient delivered a full-term normal child seven months later.

The case to be reported in this paper (H.N., Hosp. No. C37003 and C40200) deals with a normal white woman, thirty-four years of age, a gravida II, para I. Her first pregnancy occurred three and one-half years previously. At that time she was delivered of an 8 pound 3 ounce male infant, with a sixteen-hour labor, and a breech presentation. Her menstrual history revealed onset at thirteen years, with an interval of thirty-three to thirty-five days, a duration of six-seven days, and an associated moderate pain. She had been married six years. She was 61½ inches in height and weighed 122½ pounds when first seen. Her blood pressure was 110/60 and her temperature 99.0. Hemoglobin was 75 per cent and red blood count 3.61. Serology was negative, as were the urinary findings. Her measurements showed her to have a mild platypelloid type of pelvis. Her only illness had been an appendectomy in 1934.

The last menstrual period was given as March 29, 1945, making her estimated date January 5, 1946. Two visits revealed a normal prenatal course. On September 14, 1945, at 1:30 A.M. the patient suddenly developed a sharp, lower abdominal pain, which existed about nine hours before she entered the hospital. This was during her fifth month of pregnancy. The pain was continuous, non-radiating, and intermittently increased in severity. There was no nausea, vomiting, chills, fever, constipation nor diarrhea. The patient stated on admission that her abdomen seemed much fuller and larger, and that it was more tender. About eight days prior to admission, the patient had a slight, painless, bloody vaginal discharge. She gave no history of injury at any time during her pregnancy.

Physical examination on admission revealed the patient to be acutely ill. Her blood pressure was 110/76 and her pulse 80. Her fundus was two fingerbreaths

above the umbilicus, and the abdomen was diffusely tender, more so in the right lower quadrant. Fetal parts were felt, fetal movements noted, and the fetal heart was regular in rate and rhythm at 140/minute. Rectal examination revealed no abnormalities except a band from the cervix to the vaginal wall, which had previously been noted. Her blood count was as follows: RBC 3.30, Hb. 10.8, Color Index 1.0, WBC 7,100, Neut. 84 per cent, Fil. 75 per cent, Non-Fil. 9 per cent, Eos. 1 per cent, Lymph. 14 per cent, Mono. 1 per cent. Later in the day her count was: RBC 3.85, Hb. 12.0, Color Index 1.0, WBC 9,300, Neut. 85 per cent, Fil. 67 per cent, Non-Fil. 18 per cent, Lymph. 14 per cent, Mono. 1 per cent.

Observation for twenty-four hours showed the patient's pulse to remain between 80 and 90. Her blood pressure varied from 100/60 to 100/68. The fetal heart continued regular in rhythm, its rate varying from 134 to 160. During this period, her abdominal discomfort remained generalized, with slightly more tenderness in the right lower quadrant. The next morning, her abdomen was more distended, and the abdominal pain increased in severity. The uterus remained relaxed. The blood count was as follows: RBC 3.56, Hb. 11.5, Color Index 1.0, WBC 7,500, Neut. 79 per cent, Fil. 62 per cent, Non-Fil. 17 per cent, Eos. 1 per cent, Bas. 1 per cent, Lymph. 15 per cent, Mon. 4 per cent. Temperature was 98.0, pulse 80 and respirations 20.

The pre-operative diagnosis was: Pregnancy, five months; torsion of ovarian cyst, or intestinal obstruction. Under spinal anesthetic of 150 mgms. of novocaine crystals, the abdomen was opened. The abdominal cavity and pelvis were filled with chocolate colored material from a ruptured right endometrial ovarian cyst. The omentum was colored over its entire surface with the chocolate exudate, and the intestines were generally distended. The surgery consisted of a right oöphorectomy. The microscopic pathological diagnosis was: "Decidual reaction in chocolate cyst of ovary."

Because of the distention, continuous Wangensteen suction was started upon the patient's return from the operating room. Intravenous 5 per cent glucose in saline was ordered t.i.d., as were 5 mgm. of Lipo-Lutin and 100 mgm. of thiamin chloride daily. Because of the persistence of her distention, heat was used on the abdomen for two days, ad the suction was continued for five days. The blood count two days postoperatively was: RBC 3.58, Hb. 11.2, Color Index 1.0, WBC 9,800, Neut. 85 per cent, Fil. 59 per cent, Non-Fil. 26 per cent, Eos. 1 per cent, Lymph. 14 per cent.

On the fourth and fifth postoperative day 250 c.c. of whole blood were given. The temperature and pulse were normal after the fourth day. The patient was discharged on the fifteenth day in good condition.

On January 6, 1946, three and one-half months after the oöphorectomy, the patient entered the hospital and after two hours of labor delivered a full term, 8 pound 2 ounce male infant. She was discharged on the tenth postpartum day, following an uneventful convalescence.

Postpartum examination on February 14, 1946, revealed a relaxed pelvic outlet and an adhesive band from the cervix to the lateral vaginal wall. Otherwise, the pelvis was normal.

Conclusions

1. A case of a ruptured endometrial cyst in the fifth month of pregnancy is reported.

2. This is the only case found in the literature in which a ruptured chocolate cyst was removed during pregnancy and the pregnancy proceeded uneventfully to full term.

3. Decidua was found in the microscopic section of this cyst.

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3. Reynolds, E., and Mac Comber, D.: Fertility and Sterility in Human Marriages. W. B. Saunders Co., 1924.
4. Scott, R. B.: Endometriosis and Pregnancy. Amer. Jour. Obstet. and Gynec., 47:608-632, 1944.

MSMS

SAINTS AND SINNERS

When some fellow yields to temptation,
And breaks a conventional law,
We look for no good in his make-up,
But God! how we look for a flaw!
No one will ask, "How tempted?"
Nor allow for the battles he's fought;
His name becomes food for the jackals;
For us who have never been caught.

"He has sinned!" we shout from the house-tops,
We forget the good he has done,
We center on one lost battle,
And forget the times he has won.
"Come. Gaze on the sinner!" we thunder,
"And by his example be taught.
That his footsteps lead to destruction,"
Cry we who have never been caught.

I'm a sinner, O Lord, and I know it,
I'm weak, I blunder, I fail,
I'm tossed on life's stormy ocean,
Like ships embroiled in a gale.
I'm willing to trust in Thy mercy;
To keep the commandments Thou'st taught,
But deliver me, Lord, from the judgment,
Of saints who have never been caught!

—Federal Probation

(Contributed by Mental Hygiene Committee)

"Do Unto Others"

We are now entering the era that will probably be known in history as that of fission, nuclear or atomic energy. It makes little difference what terms are applied to this newly found awe-inspiring force. What is important is that every good American citizen realize its potential possibilities for good or evil. It is for that reason the Michigan State Medical Society has not only a committee to co-operate with lay groups, but also has one whose sole purpose is to know and dispense to the medical profession as much knowledge concerning atomic energy as it is possible to obtain.

We believe it is vitally essential that the medical profession should carry the brunt of this responsibility of education.

We believe that if our patients are thoroughly aware of the potential power of destruction when fission energy is released, they will want citizens of highest integrity to control that energy.

We believe that if we set the proper example in this country, we can be influential throughout the world in accomplishing bigger and better things for world peace. If our efforts prove futile and if atomic, biologic or chemical warfare is released in this country, we must be prepared to render the highest quality of medical care that is humanly possible.

Undoubtedly, then, this becomes a *major* project in 1951.

In order to accomplish the above named project it will be most essential that we continue the work so well begun by our C.A.P. ("Co-operation with the American People") organization in our primary elections.

Our efforts must be redoubled until we have given everything we can to insure that in the November election only men of honesty and integrity are standing guard on the political front and guiding the use of atomic energy. Would anyone today condone a lack of moral responsibility toward our fellow man?

Some time ago one of our delegates said, "What we need in this and every other organization is a little 'old time religion.'" Everyone in the room was startled. We think we know what the Doctor meant. The principles laid down in the Sermon on the Mount are more important today than they ever have been in the past. These principles must guide the release of atomic energy for the benefit of all mankind.

"Do unto others as you would have them do unto you."

C E Umphrey M D

President, Michigan State Medical Society

President's

Page

University of Michigan Medical School

Department of Postgraduate Medicine

POSTGRADUATE COURSES DURING THE FALL, 1950

EXTRAMURAL PROGRAM

Center	*Dates*
Alpena	Thursday, October 12
Battle Creek	Tuesday, October 3
Bay City	Wednesday, October 11
Flint	Tuesday, October 10
Jackson	Tuesday, October 17
Lansing	Tuesday, November 28
Midland	Thursday, November 16
Mount Clemens	Wednesdays, October 11 & 25
Muskegon	Wednesday, November 8
Traverse City	Thursday, October 5
Upper Peninsula:	
Escanaba	Monday & Tuesday, November 6 & 7
Iron Mountain	Tuesday & Wednesday, November 7 & 8
Menominee	Wednesday & Thursday, November 8 & 9
Sault Ste. Marie	Thursday & Friday, November 9 & 10
Marquette	Monday & Tuesday, November 6 & 7
Houghton	Tuesday & Wednesday, November 7 & 8
Ironwood	Wednesday & Thursday, November 8 & 9

INTRAMURAL COURSES

University Hospital, Ann Arbor, Michigan

Clinical Internal Medicine	Thursdays—October 5 to December 21, 1950; January 10 to April 19, 1951. 1:30-5:00 p.m.
Clinical Exercises for Practitioners	Wednesdays—October 18 to December 20, 1950. 10:00 a.m.-5:00 p.m.
Special Pathology of Neoplasms	Twice a week. Hours and days to be arranged. September 26-November 17, 1950.
Diagnostic Methods. Clinical and Laboratory Interpretation	November 7-10, inclusive 9:00 a.m.- 5:00 p.m.
Cancer	January 16-19, 1951 9:00 a.m.-12:00 m. 1:30-5:00 p.m.

For further information, write to

H. H. CUMMINGS, M.D., Chairman
Department of Postgraduate Medicine
University Hospital, Ann Arbor, Michigan

Editorial

EMERGENCY CATASTROPHE RELIEF

RECENTLY information has filtered through to the medical profession regarding defense measures in case of atomic warfare. The medical profession has been studying this matter for a long time. The Michigan State Medical Society has had a committee working actively for several years and has recently appointed another committee to study atomic energy in all of its relations to human well-being.

The Federal Government is considering what can be done. The Program is placed under the United States Public Health Service to supervise the welfare and health care of the destitute and injured if atomic warfare should come to us. Instructions are being sent out to the States, to the Public Health Departments and from the Public Health Departments down to the local health officers who will be given the responsibility for medical care and relief.

Following is a letter from the Executive Office of the President, National Security Resources Board, Washington, D. C., June 13, 1950, sent to many persons and not restricted.

"Dear Governor:

"One of the important categories of Civil Defense is that of health services, including: (1) care of casualties and the ill; (2) measures to be taken against atomic, biological and chemical warfare on civilians; (3) maintenance of sanitation services; (4) provision of medical supplies; (5) organization of emergency hospitals; and (6) mobilization of health, personnel and trained auxiliaries.

"Attacks on our civilian population, with large numbers of casualties, might find us with severe shortages of health personnel, of hospitals and other facilities and of health supplies. These shortages might be overcome in large part by efficient mobilization of health manpower and facilities and by carefully planned nation-wide supply organization.

"The Civilian Mobilization Office through its Health Resources Division has extensive plans for civil defense health services. Our plans have reached a point where it is now desirable to establish direct professional communication, on technical matters, with *State health officials who we assume will be charged with the responsibility in your state for development of State Civil defense health and medical plans.*

"Accordingly, *we recommend your designating* the *State health officer* as the person responsible for State civil defense health services, in order that these services may be carried on as an official function of the State, and because your State health officer is now your designated representative to work with the U. S. Public Health Service. *We will be relying upon the Public Health Service for medical guidance for* the States under our long-range Civil Defense planning.

"As soon as you have advised us of your action, direct contact will be established between our Health Resources Division and your State health officer for exchange of professional information and advice.

"It would be desirable to have various State and local professional organizations of health experts — such as medical, nurse's and dental societies as well as other voluntary organizations which have health programs, represented on an Advisory Committee to the official health agency or to your defense council.

"It is also recommended that local civil defense agencies *be encouraged to appoint their local health officer to head their civil defense health and medical services.* All of these activities, we assume, will be under the supervision of your defense council director and coordinated by him.

"Enclosed for your information is a copy of the revised bibliography on Civil Defense Against Atomic Warfare prepared by the Atomic Energy Commission. A supply is being sent to your State Civil Defense Director.

"Thank you for your cooperation."

Sincerely,

PAUL J. LARSON, *Director*
Civilian Mobilization Office

The Secretary of the Michigan State Medical Society received a letter from the Council on National Emergency Medical Service of the American Medical Association, July 10, 1950.

"Dear Doctor Foster:

"The Governor of your state has received, within the past several days, a letter of which the enclosed is a duplicate.

"It is urged that the policy thus being established will govern such matters as medical education, the staffing of hospitals, intra- and inter-state medical assistance and the *actual assignment and allocation of civilian physicians in* the event of a national emergency requiring activation of civil defense program.

"The Council believes that the importance of such mobilization policies warrants the immediate attention of all state and county medical societies. It therefore suggests that the facilities of each state and territorial medical association be made immediately available to the Governors and the Civil Defense Directors of all

*The italics are by the Editor.

states and territories and that every effort be made to accomplish the appointment of adequate medical representation on a Civil Defense Council advisory to the Governor and on a Health Advisory Committee to the Director of Medical and Public Health Services."

Sincerely,

ROBERT M. HALL, M.D., *Secretary*
Council on National Emergency
Medical Service

These two letters implement a program under which if a National Emergency is called the medical profession may be mobilized under the direction of the U. S. Public Health Service and the Federal Security Administrator, Mr. Oscar Ewing.

CONTINUING TO PROMOTE SOCIALISM

OUR NATIONAL leaders are committed to the program of National Socialization with a special bent toward the control of medicine as the first item. They let no opportunity pass to further their program and the present threat of a national emergency with the urge to prepare a civil defense program has offered opportunity for another step toward their goal.

We believe many plans are necessary for the proper protection of the health and the distribution of health care to our people but the medical profession has a well organized, well working association perfectly competent to do this work and it does not have to be regimented under Mr. Ewing.

We are sorry this method has been adopted and urge its modification. As members of the medical profession we have been opposed to the health departments entering into the actual practice of medicine.

We recognize the wonderful work of our Health Departments, and will cooperate with them in every way, but of course will combat with all our resources the endeavors of the bureaucrats to usurp our direction of medical care as such. We wish the Government had vision enough to work through the organized medical profession who are already leading, several years ahead, in their disaster relief planning. We wish the government had confidence in us to do a thorough and satisfying job. We must give the health relief anyway. We will continue to work under our own selected leaders rather than to be regimented under the Federal Public Health Officials who have enough to do in their own field without entering into the practice of medicine.

During World War II, "Procurement and Assignment" was established by the medical profession, and did a real job. We could again.

WE PROPOSE

WE HAVE in Michigan at least one Doctor of Medicine who has the complete respect and confidence of the profession, who has been President of our Society and who has served in very responsible military positions in two World Wars. He knows the threat to our present economy, he knows the needs of civilian defense, he knows weapons that will be used against us and he knows measures which must be taken for our own protection. He is an experienced trained administrator, as well as military man. He could have been and we hope will be designated to head the civil defense program in Michigan.

There is not a metropolitan area in our State that does not have men who know the needs, who know the military implications and who would be willing to use their talents. These are men whom the profession respects as leaders in professional matters. We are perfectly willing to follow the leadership of the health departments in matters of public health, sanitation, et cetera, but we do not believe they should enter into the practice and distribution of medical care. We have opposed such measures consistently in Michigan, and we believe a better method could be found to implement the services which our men will be only too glad to render.

DREW PEARSON'S BROADCAST
Sunday Evening, July 23, 1950

DREW PEARSON'S substitute during his vacation accused the medical profession of defeating a move in Congress which would have furnished thousands of medical men for the Armed Forces. A bill was under consideration providing for subsidies for medical colleges which, if the tempo of our times continues, might prepare some medical officers for World War IV. The medical profession was compelled to oppose this measure, not to prevent the training of medical men which we are strongly favoring but to prevent the domination of the medical schools by the Federal Government. Drew Pearson's man failed to tell the public the real reason for this action of the profession: a recent Supreme Court decision, and the

one of 1942, to the effect that anything which the government subsidizes, it may control. We would not wish our medical schools to be run by Oscar Ewing.

PENICILLIN DOSAGE IN RHEUMATIC INDIVIDUALS AND PATIENTS WITH CONGENITAL HEART DISEASE

A STATEMENT approved by the American Council on Rheumatic Fever of the American Heart Association recommends specific dosage for the administration of penicillin before dental extractions and removal of tonsils and adenoids in rheumatic individuals or patients with congenital heart or blood vessel defects to prevent the possible development of subacute bacterial endocarditis. The text of the statement follows:

"Following dental extractions and removal of tonsils and adenoids, bacteria are frequently present in the blood stream for short periods of time. In rheumatic individuals or in patients with congenital heart disease these bacteria may lodge in the heart valves and cause bacterial endocarditis. Although a variety of bacteria cause this disease, the majority of cases are due to alpha streptococci (streptococcus viridans). Alpha streptococci are usually resistant to sulfa drugs. Penicillin is, therefore, recommended for prophylaxis.

"1. Except in emergencies operative procedures in rheumatic individuals should be deferred until there is no clinical evidence of rheumatic activity and laboratory tests indicate that the rheumatic process is subsiding.

"2. Patients should be free from upper respiratory infection.

"3. Minimum dosage of penicillin:

(a) 300,000 units of aqueous penicillin intramuscularly 30-60 minutes before extraction or operation.

(b) 300,000 units of procaine penicillin in oil injected intramuscularly at the same time in a different site.

"Penicillin prophylaxis is not necessary for the extraction of deciduous incisors or bicuspids unless infection of the gum is present. It should be used for the extractions of deciduous molars, all permanent teeth and for tonsillectomy and adenoidectomy. In most instances it is best to extract one tooth at a time; multiple extractions should be avoided. In cases of extensive gum infection or severe root infections (apical abscesses) it is advisable to give several doses of penicillin starting the day before operation and continuing one or two days thereafter.

"Women with rheumatic or congenital heart disease should receive penicillin prophylaxis at the time of delivery. It is also recommended for patients requiring gastrointestinal surgery."

DRAFT-DOCTORS OR VOLUNTEERS?

THE QUESTION of whether the selective service laws will be amended to permit drafting of Doctors must be considered. (Two bills have been introduced.) The government is now calling upon its reserve medical officers for voluntary service. It is also attempting to secure former ASTP's and V-12's who served no active duty in the Armed Forces. There is a provision by which medical and dental officers who enter voluntary service receive $100.00 monthly extra pay, but if these Doctors or Dentists enter active duty by way of selective service or any other involuntary method they will not be eligible for this $100.00 bonus.

James C. Sargent, M.D., of Milwaukee, Chairman of the AMA Council of Emergency Medical Service, has made an appeal to physicians trained at government expense during World War II to volunteer their services to the Armed Forces. "There are many thousands of physicians who were deferred from service during the War in order to complete their education. Many thousand others were educated at government expense in the ASTP and V-12 programs. Others received their intern training in hospitals of the Armed Forces. Most of these have had little or no active military service. The AMA has recognized in the past the moral obligation of these young physicians to their government and to the people of the United States. It would seem that these young men have a moral responsibility to come forward immediately to offer their services for use when needed and to continue the spirit of service demonstrated by the older physicians who volunteered during World War II." At the time of the attack on Pearl Harbor, December 7, 1941, 11,000 civilian physicians had already reported for military service. In a year this number was increased to 42,000 and at the height of the war, over 60,000 physicians had entered military service from civilian life. This was all voluntary. It can happen again.

DIABETES DETECTION

THE DISEASE we call diabetes has been known for over 2,000 years, but the present methods of its control and regulation have been developed in the past twenty-eight years.

Before 1921 the disease was almost 100 per cent fatal when its symptoms appeared early in life.

Affected children suddenly began to lose weight, became very thirsty and passed large quantities of urine. These symptoms became progressively worse until the patients dropped into a deep coma from which they never recovered. From the time the first symptoms appeared it was seldom over two years and frequently less than two months when death resulted.

Adults afflicted with the disease were a little more fortunate. Most of the cases exhibited the same symptoms at the onset, but the progression was much slower. Coma often appeared following some severe infection or systemic shock and death was the usual end result. However, many cases lived on for years with the disease and in these cases the disturbance in metabolism resulted in a gradual degeneration of the blood vessels which is called arteriosclerosis. As the tissues of the body began to feel the decrease in nourishment supplied them through these degenerated vessels they too began to degenerate. This disturbance usually manifested itself in the extremities where gangrene frequently developed. Another very frequent complication was blindness resulting from the growth of cataracts or from retinal hemorrhages, retinal degenerations, and optic atrophy. All in all, the plight of the diabetic was not pleasant.

Sir Frederick Banting in 1921 successfully isolated a substance which is normally produced in the body by certain cells within the pancreas. Insulin is a necessary part of the combustion of sugar. Without sufficient quantities of insulin in the body the amount of sugar in the blood rapidly rises, because it is not being utilized by the tissues.

If the pancreas is removed from a dog, the animal rapidly develops the same symptoms as a diabetic and dies in coma. Banting was successful in keeping these dogs alive and healthy by these same injections.

The production of insulin in the body is automatically controlled by the nervous system so that it varies up and down with our intake of food. The injected insulin is not, of course, automatic, so the diet has to be regulated as to quantity to keep the food intake and available insulin in balance.

With proper dieting and proper insulin dosage, diabetics can enjoy as healthy, long, useful and comfortable lives as normal people. Many of our adult diabetics today were not found to be suffering from the disease until arteriosclerotic changes had already developed in their arteries. On the other hand, we have on record a few diabetics who were discovered early in life without artery damage and who have been kept healthy on a diet and insulin for twenty-five years without evidence of these serious adult complications.

The American Diabetes Association is embarking upon a program aimed at the discovery of more of these diabetics before the complications develop. From the evidence gathered during twenty-eight years of insulin therapy it is our belief that proper control of the diabetics by diet and insulin will prevent to a great extent this blood vessel degeneration.

A survey was recently conducted in Oxford, Massachusetts, from which one must conclude that aside from the million known diabetics in the United States there are another million who as yet do not know they are suffering from the disease. Either the symptoms are too mild or the patients have not yet consulted a physician about their condition.

The symptoms of diabetes are thirst, excessive urination, loss of weight, weakness, and craving for food. Persons with any of these symptoms should see their doctor at once. They should not wait for all the symptoms to develop. Loss of weight by a previously overweight person is most important. It is a well known fact that diabetes is a familial disease, so it is very important for the relatives of known diabetics to be checked for the disturbance frequently.

In case of doubt, see your doctor.

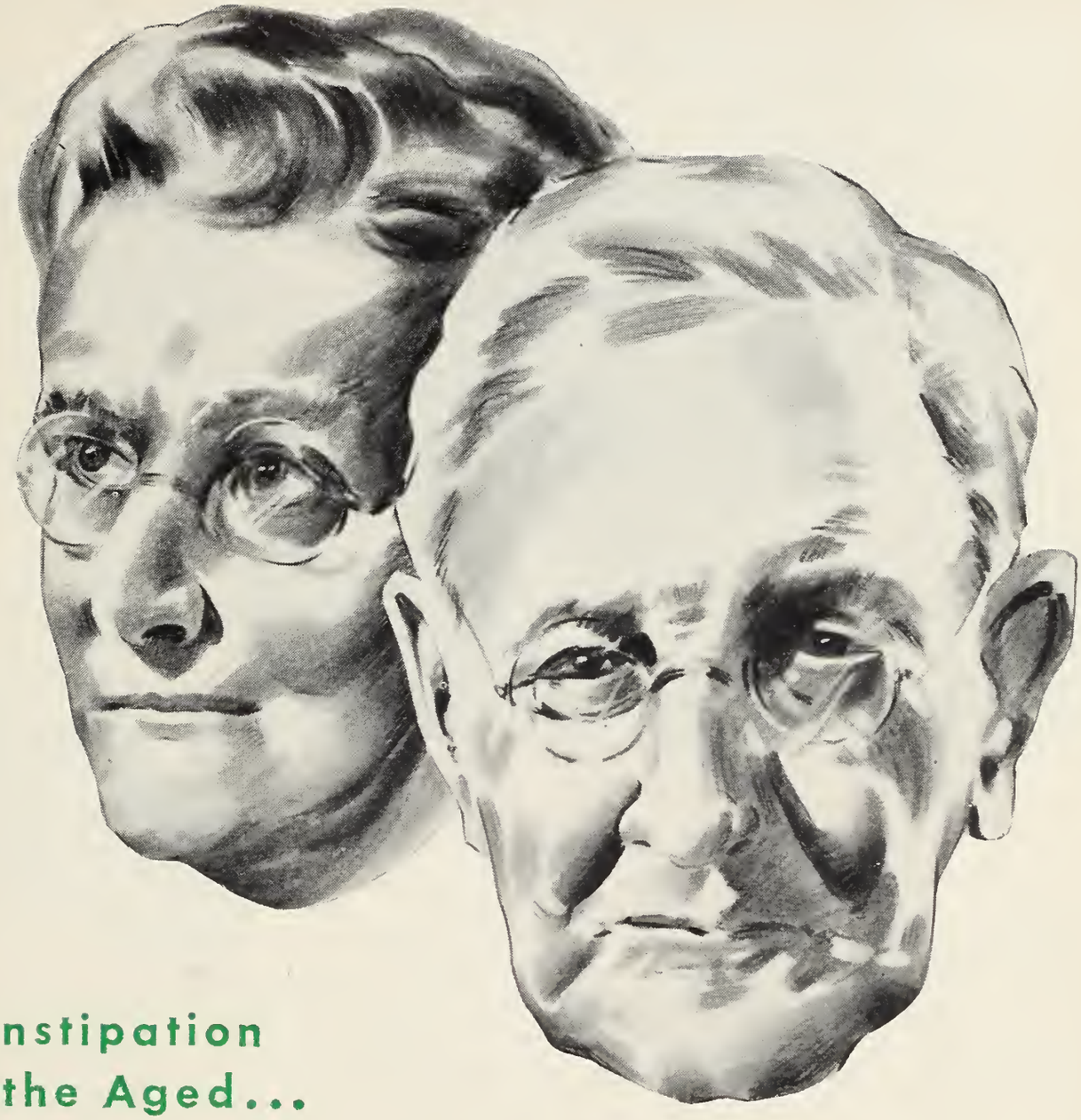
The week of November 12 to 18, 1950, has been designated as Diabetes Week, during which special emphasis will be given the subject.

William M. LeFevre, M.D., *Chairman*
Sub-Committee on Diabetes MSMS

Dust as we are, the immortal spirit grows
Like harmony in music; there is a dark
Inscrutable workmanship that reconciles
Discordant elements, makes them cling together
In one society. How strange that all
The terrors, pains, and early miseries,
Regrets, vexations, lassitudes interfused
Within my mind should e'er have borne a part,
And that a needful part, in making up
The calm existence that is mine when I
Am worthy of myself.

—Wordsworth

Social and fraternal organizations are urged to include diabetes in their program for the next year. Speakers for such occasions will be furnished on request to the Sub-committee on Diabetes of the Michigan State Medical Society.



Constipation in the Aged...

The commonly encountered constipation of the older age group may result from reduced activity, lack of appetite for bulk-producing foods and inadequate ingestion of fluids.

By providing hydrophilic "smoothage" and gently distending bulk, Metamucil encourages normal physiologic evacuation without straining or irritation.

ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

METAMUCIL® is the highly refined mucilloid of Plantago ovata (50%), a seed of the psyllium group, combined with dextrose (50%) as a dispersing agent. G. D. Searle & Co., Chicago 80, Illinois.

RESEARCH IN THE SERVICE OF MEDICINE **SEARLE**

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

Venereal disease facts for lay people are being presented to patrons of eight Michigan fairs this summer in a midway tent show operated by the Michigan Department of Health.

The walk-through type of exhibit entitled "Since Adam and Eve" includes animated dioramas, posters, photographs and pamphlets. It is a departure from the motion picture type of midway show presented during the past two years.

Approximately 61,000 Michigan people saw the history-making motion picture tent show at seventeen fairs in the past two years. The walk-through type of show is expected to reach an even larger audience. Since the motion picture midway show was initiated in Michigan, at least fifteen other states have adopted that educational technique.

"Since Adam and Eve" made its first appearance at the Barry County Fair in Hastings, August 2-6. It also appeared at the Ionia Free Fair, August 7-12, and the Bay County Fair, August 22-27. It is scheduled for the Michigan State Fair, Detroit, September 1-10; Allegan County Fair, September 11-16; St. Joseph County Fair, Centreville, September 18-23; and Hillsdale County Fair, September 24-30.

When the fair circuit is complete, the exhibit will be available through local health departments for use in convention halls, expositions and indoor fairs throughout the state during the winter months.

Emotional health, causes of communicable disease and the services of the local health department are subjects of new motion picture films recently added to the Film Loan Library of the Michigan Department of Health. These films may be borrowed without charge for showing to community groups.

Emotional Health, 20-minute sound film produced by the McGraw-Hill Book Company, is designed to convince young people that emotional upsets are common; to show that if a disturbance of this kind is prolonged, the need for professional counsel and care is just as important and normal as with any physical illness; and to explain in simplified language some of the basic techniques of psychiatric treatment and thereby allay some of the stigma attached to the necessity of this treatment. For senior high school, college and adults.

Search for Happiness, 17-minute sound film produced by the March of Time Forum Edition, examines modern living and its effects on mankind. It airs some of the problems of man and how he attempts to solve or escape them by turning for advice and counselling where it is proffered and, with unflagging optimism, buying potions and pills, following the advice of astrologists and numerologists, adhering faithfully to such mail order courses as muscle building—always certain that a miraculous solution to all his problems is just around the corner. For senior high school, college and adult groups.

Problem Children, 20-minute sound film produced by the Pennsylvania State College, tells the story of two children and how their personalities are affected by their relationships in home and school. For college and adult groups.

Play is Our Business, 20-minute sound film produced by Sun Dial, shows typical play school settings in public schools, a settlement and housing project where children from five through thirteen years of all races and creeds are provided with a wide range of enriching play activities for their after-school hours in winter and all day during the summer vacation. For college and adult groups.

What is Disease, 10-minute sound, color cartoon produced by the Institute of InterAmerican Affairs, sets forth some of the causes of common communicable diseases and the ways in which they are spread. Of interest to all age groups.

E. Freeman Hersey, M.D., has been appointed director of the Lenawee County Health Department. He assumed his new duties July 5, 1950.

George R. Landy, M.D., Director of the Sanilac County Health Department since July 1, 1949, resigned effective June 30, 1950.

Elwin W. Topp, M.D., director of the Saginaw City Health Department since May 15, 1949, resigned effective July 1, 1950.

John A. Wessinger, M.D., director of the Ann Arbor City Health Department, has retired after forty-five years in that position. Otto K. Engelke, M.D., is health officer for Washtenaw County and Ann Arbor city.

B. H. Van Leuven, M.D., director of the Grand Traverse-Leelanau County Health Department since July 1, 1946, resigned effective July 1, 1950.

The Michigan Department of Health in July reiterated its warning to Michigan parents to check up on the status of the immunization of their children who are about to enter school.

A pilot study which may result in standardization of monthly reports of all local health department activities in the state is now being conducted by the Division of Disease Control, Records and Statistics and the Eaton County Health Department.

The local health department sends daily reports of each local health activity by each local health department staff member and by township to the state health department where daily reports are mechanically tabulated and daily and monthly summaries made. All reports are standard and contain the information required to be reported for the USPHS evaluation schedules. The

(Continued on Page 1100)

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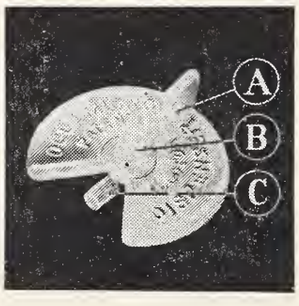

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(Continued from Page 1098)

summaries provide a readily accessible means of evaluation of the work being done on each program and by each worker, and in each township. Copies are retained in the state health department. Others are returned to the local health departments.

Several other counties have requested the service. The department has the tabulating equipment necessary and provision of the service depends on additional staff.

The main office of District Health Department No. 3 is now located in the City Hall, Charlevoix.

Dr. Albert E. Heustis, State Health Commissioner, has been re-elected chairman of the Michigan Water Resources Commission. Glen P. Manz, Lansing City Engineer, was named vice-chairman.

Michigan now has 256 known typhoid fever carriers, all of whom are under close supervision of the health departments of the state.

The health departments' diligent search for typhoid fever spreaders during the past 18 years has revealed a total of 548 carriers in the state and has cut both the number of new cases and the number of deaths from the disease. A total of 424 new cases of typhoid fever and 75 deaths from typhoid fever were reported in 1931. In 1949, 48 new cases of typhoid fever and one death from typhoid fever were reported in the state. Michigan has had no new case of typhoid fever due to a public water supply in the past 16 years.

When it became known in 1932 that the main source of typhoid fever infection in Michigan was human carriers, the health departments of the state undertook a systematic search to find the carriers and began a typhoid fever control program which emphasized carrier control, safety of public water supplies, complete pasteurization of milk supplies, proper sewage disposal and a close check of food handlers.

Under this program known typhoid fever carriers are supervised throughout their lives to see that they do not handle food, water or dairy products intended for public consumption. They are visited by state or local health officers four times a year, and are required to notify the health officer of any change in address. The identity of typhoid carriers is held confidential as long as the carrier co-operates with the health departments. No patient is released from health department supervision until three laboratory tests of his stools, a week apart, show no typhoid fever germs. Between two and three per cent of typhoid fever patients remain carriers of the disease.

To help make up for the loss of the Rapid Treatment Center, the Division of Venereal Disease Control has revamped its program, and members of the State Health Department are now making a tour of all the local health departments in the state to assist in the expansion and correlation of local V.D. control programs.

While it is expected that practicing physicians will play an even broader role in venereal disease control than before, greater emphasis is also being placed on the

(Continued on Page 1102)

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(Continued from Page 1100)

venereal disease education, casefinding, diagnosis, and treatment services of local health departments to help maintain the gains that Michigan has made against venereal diseases.

The revamped venereal disease control program of the Michigan Department of Health calls for: assisting local health departments in intensified education programs; making available to local health departments venereal disease investigators to assist in contact-tracing and follow-up; providing for the services of private consultants who are specialists in syphilology and dermatology for diagnosis of problem cases; and the distribution of penicillin to local health departments for use in clinics and for distribution to private physicians for the treatment of syphilis and gonorrhea.

Public Health people from Norway, Greece, Brazil, the Philippines and Germany visited the Department during late July and early August. The visitors included: Dr. Gustav Vig, public health officer of Finnmark, Norway; Dr. Meropi Violaki of Athens, Greece, Dr. Hildegard Rothmund, a county health officer from Germany; Dr. Albert Herrlich of the University of Munich, Germany; and Felomina Chiarello, a nurse from the school of hygiene and public health, Sao Paulo, Brazil, and Dr. Eriberto Y. Aguilar and Dr. J. L. Adan of the Philippines.

Diabetes and premature births changed places among Michigan's ten leading causes of death for 1949.

Diabetes, which has been increasing in prominence as a cause of death for the past three years, is now in seventh place and premature births, against which the practicing physicians and the health departments are conducting a diligent campaign, have declined for the past three years and are now in eighth place.

The ten leading causes in 1949 in their order were: heart disease, cancer, apoplexy, accidents, nephritis, pneumonia, diabetes, premature births, tuberculosis and arteriosclerosis.

Deaths due to heart disease, cancer, apoplexy, pneumonia, diabetes and arteriosclerosis increased in 1949. Deaths due to accidents, nephritis, premature births and tuberculosis decreased.

The ten leading causes of death in Michigan during the past three years follow (provisional figures for 1949):

	1949	1948	1947
1. Heart Disease	19,137	18,726	18,412
2. Cancer (including Leukemia, Aleukemia, Hodgkin's Disease)*	8,697	8,261	8,110
3. Apoplexy	5,325	5,170	5,293
4. Accidents	3,838	4,017	3,848
5. Nephritis	2,435	2,473	2,567
6. Pneumonia	1,885	1,853	2,089
7. Diabetes	1,884	1,771	1,618
8. Premature Birth	1,795	1,820	1,953
9. Tuberculosis	1,400	1,561	1,643
10. Arteriosclerosis	1,135	1,085	1,031
Total Ten Causes	47,531	46,737	46,564
All Other Causes	9,576	9,783	10,243
Total Deaths	57,107	56,520	56,807

*1947 and 1948 figures do no include Hodgkin's disease, which caused 85 deaths in 1949.

(Continued on Page 1104)

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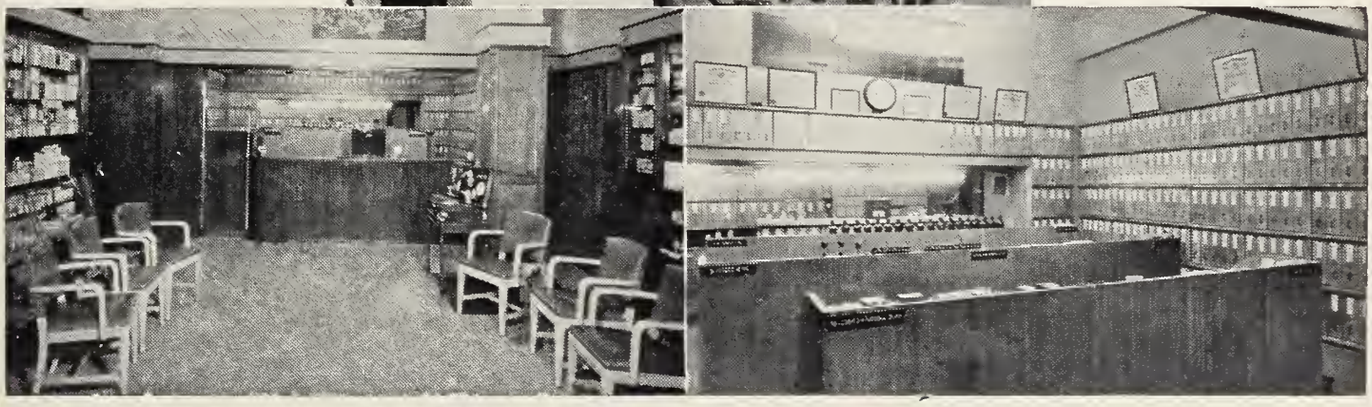

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(Continued from Page 1102)

D. B. Meyer, D.V.M., manager of the Quarantine Farms of the Michigan Department of Health, is co-author of a chapter in the British "Universities Federation for Animal Welfare Handbook on the Care and Management of Laboratory Animals" which is now being reprinted in this country. Dr. Meyer's paper on "The Production of Cotton Rats in Captivity" is the only one in the manual written by other than a British scientist.

* * *

Information on eighty-five bathing areas which are definitely polluted and unsafe for swimming and twenty-one others, the safety of which is questionable, has been released in the State. Local health departments have been requested to post the bathing beaches which are definitely polluted. The safety of questionable areas is dependent on such variable factors as wind, water current, recent rainfall, and time elapsed since these factors. Questionable areas are not posted but at times they are hazardous.

A new film on local health services has been added to the Film Loan Library of the Michigan Department of Health.

"So Much for So Little," a ten-minute sound color cartoon, distributed by the United States Public Health Service, presents the life of John Jones from infancy to old age, showing the vital part the local health department plays in maintaining his good health and the low cost of health protection. The need for adequate health services in the community is stressed and many of the services of a local health department are illustrated. The film is suitable for all age groups.

* * *

The Michigan Department of Health is reemphasizing the importance of immunization against tetanus, especially for little children, for those who work or play around horses and for those who vacation in the country. It is also advising that all puncture or scraping wounds be treated by physicians.

The Department recommends that all children be immunized against tetanus when they are between six and nine months of age and that they be given booster shots by age three and at age five, and every five years thereafter.

* * *

After this year, the Michigan Public Health Association will hold spring conferences.

Since about 61 per cent of the members voting favored a spring conference and about 41 per cent of those voting favored the month of May, the 1951 conference will be foregone and the 1952 conference will be held in the Hotel Statler, Detroit, May 14-16, 1952. The 1950 conference will be held in the Pantlind Hotel, Grand Rapids, November 29-December 1, as previously scheduled.

The American Public Health Association will hold its annual convention in St. Louis, Missouri, October 30 to November 3, 1950.

An Observation on the Accuracy of Digitalis Doses

Withering made this penetrating observation in his classic monograph on digitalis: "The more I saw of the great powers of this plant, the more it seemed necessary to bring the doses of it to the greatest possible accuracy."[1]

To achieve the greatest accuracy in dosage and at the same time to preserve the full activity of the leaf, the total cardioactive principles must be isolated from the plant in pure crystalline form so that doses can be based on the actual weight of the active constituents. This is, in fact, the method by which Digilanid® is made.

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Clinical investigation has proved that Digilanid is "an effective cardioactive preparation, which has the advantages of purity, stability and accuracy as to dosage and therapeutic effect."[2]

Average dose for initiating treatment: 2 to 4 tablets of Digilanid daily until the desired therapeutic level is reached.
Average maintenance dose: 1 tablet daily.
Also available: Drops, Ampuls and Suppositories.

1. *Withering, W.:* An account of the Foxglove, London, 1785.
2. *Rimmerman, A. B.:* Digilanid and the Therapy of Congestive Heart Disease, Am. J. M. Sc. *209:* 33-41 (Jan.) 1945.

Literature giving further details about Digilanid and Physician's Trial Supply are available on request.

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A Middle States Public Health Association is being formed and has tentatively set April, 1951, as the time for its convention which will be held in Chicago.

* * *

"Eyes Bright" is a new sound color film on the maintenance of eye health which has been added to the Film Loan Library of the Michigan Department of Health. The film shows a group of primary grade children, with the aid of a teacher and nurse, learning the importance of nutrition, rest, good lighting, correct reading habits and safe play in eye health. The film is helpful for parents and teachers as well as primary grade children.

The 1950 edition of "Laws Related to the Registration of Births, Deaths and Adoptions" has been issued by the Michigan Department of Health. The revised edition, for the first time, contains "Rules and Regulations Governing the Transportation and Disposition of Dead Bodies." A copy of the booklet may be obtained by writing to the Division of Disease Control, Records and Statistics.

* * *

A supply of the leaflet, "That Extra Something a Full-Time Local Health Department Does For You," prepared by the National Advisory Committee on Local Health Departments has been secured by the Michigan Department of Health for use in the promotion of local health services in the thirteen counties which are not now covered by local health departments.

* * *

The annual meeting of the Michigan Section, American Water Works Association, will be held in the Detroit-Leland Hotel, October 25-27, 1950. There will be sections for the discussion of problems of water purification plants and well water supplies. The Water Resources Ground Water Pollution Committee and the Distribution Systems Standards Committee will report at this meeting.

* * *

Between 8,000 and 10,000 Great Lakes merchant seamen are having their chests x-rayed as their boats pass through the Sault Ste. Marie locks.

The Michigan Department of Health is co-operating with the Welfare Committee of the Lake Carriers Association and the Public Health Service in an effort to find any tuberculosis which may exist among crew members of the twenty-six member fleets of the Lake Carriers Association. The survey began July 9 and continues until August 23.

As each ship passes through the locks, crew members not asleep or on duty disembark, have their chest x-rayed and return, with the ship losing no time in transit. The x-ray equipment furnished by the Public Health Service is housed in a prefabricated building erected by the U. S. Corps of Engineers between the third and fourth locks. It is operated by a technician provided by the Lake Carriers Association.

All of the x-ray films are developed and read for tuberculosis or other abnormal conditions by the Michigan Department of Health in Lansing. Reports of findings are sent by the Department to the Lake Carriers Association. Crewmen with abnormal chest conditions are notified by fleet radiotelephone so that re-checks can be made in marine hospitals.

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Lansing, Michigan
July 26, 1950

Wilfrid Haughey, M.D.
Editor, Michigan State Medical Journal
610 Post Building
Battle Creek, Michigan

Dear Dr. Haughey:

The people of Michigan are fortunate to live in a state which offers medical care equal to any in the world. This tremendous advantage can be credited in large degree to the unselfish efforts of the members of the medical profession. The doctors of Michigan have worked earnestly and effectively to guard and protect the health of the people, and to give medical care to all who need it.

The extensive promotion of voluntary group insurance plans by members of the medical profession has done much to make medical care available to those of moderate financial resources.

Through the co-operation of industry, labor and the medical profession, these plans have been extended to a large number of our industrial workers, who would otherwise not be able to meet the financial emergencies of sickness or accident.

The Michigan State Health Department is also to be commended for the fine job it has been doing to protect the public health and raise health standards.

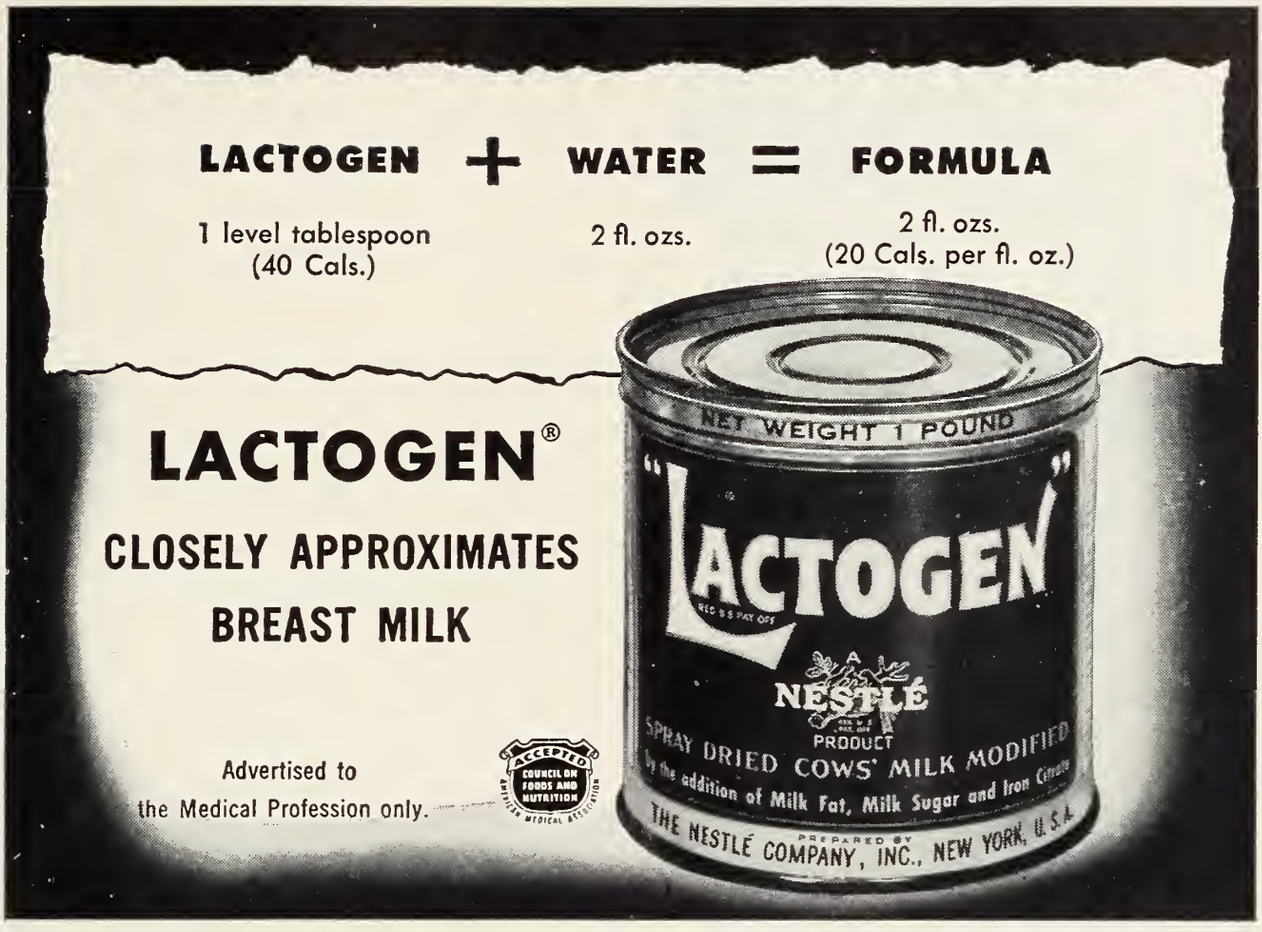
I do not believe in, or support, socialized medicine. The free choice of a physician is a priceless right which we should guard jealously. Medical or surgical treatment is a very personal matter, and the personal relationship between the individual doctor and his patient must not be disturbed. Furthermore, as a professional man myself, I believe that each profession should be given the greatest latitude in regulating itself and its relations with the public. The European version of state medicine has revealed numerous fallacies to which I do not believe the people of Michigan wish to be subjected.

At the same time we must not lose sight of the goal—adequate medical care for all our people. Health insurance programs, either public or private, which preserve the doctor-patient relationship, maintain the integrity of the profession, protect private initiative, and assure prompt and adequate payment for services rendered, appear to be the best means of meeting our problem.

However, the state still experiences an acute shortage of doctors, and this shortage will be aggravated in years to come unless our facilities for medical training are expanded. The increase in population of more than a million in ten-year period has not been matched by any comparable increase in the number of young men and women who can be given a medical education in this state.

I believe, therefore, that it should be the policy of the state to give the fullest support to our two great medical schools, at the University of Michigan and at Wayne University, so that every community in Michigan may

Say you saw it in the Journal of the Michigan State Medical Society



have access to good medical care. If medical care is made available to all, by American methods, our people will never be tempted to turn to any unworkable scheme for making medicine a function of government.

I recognize the tremendous task which you have before you. In your valiant efforts to fulfill the high responsibilities of your profession, I pledge you the fullest cooperation of the state government.

Let us work together, with the help of God, to bring the people of this commonwealth the best medical care your science can devise.

Sincerely,
(Signed) G. Mennen Williams
Governor

Dearborn, Michigan
August 7, 1950

To Members of the Michigan State Medical Society:

I am running for Governor in the Republican Primary without the support of any machine.

I am unalterably opposed to the Socialization of Medicine and the allied professions of Dentistry and Pharmacy and feel that I can do more than any other individual in the State to prevent it.

The election of an M.D. opposed to socialized medicine as Governor of Michigan would have a powerful influence upon vote conscious legislators in their deliberations on whether or not to put the Government Inspectors in our clinics, consultation rooms and pharmacies.

In many counties of the State such as Saginaw, Genesee, Wayne, Kalamazoo, etc., doctors are working on committees with laymen in behalf of my candidacy for the Governorship. If you can help in any way please write to me, Dearborn, Mich.

With kindest personal regards,

Eugene C. Keyes, M.D.

Detroit, Michigan
August 14, 1950

Wilfrid Haughey, M.D.
Michigan State Medical Society,
2020 Olds Tower,
Lansing, Michigan.

Dear Dr. Haughey:

It gives me pleasure to state my position in regard to the current discussion of the proposed National Health Insurance.

The great progress that has been made in scientific medicine over the centuries, but particularly in the last seventy-five years, has been made by free men and free women, and free doctors. They have added many years to the life span of the average American.

I am vitally interested in keeping the health of the people of Michigan in the hands of free men and women and out of political control. Thus you may state that I am definitely opposed to any form of socialized medicine or compulsory health insurance.

Our nation leads the world today in quality and quantity of medical service. Free men and women, free doctors, and nurses are making monumental progress in the struggle against human suffering.

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Say you saw it in the Journal of the Michigan State Medical Society

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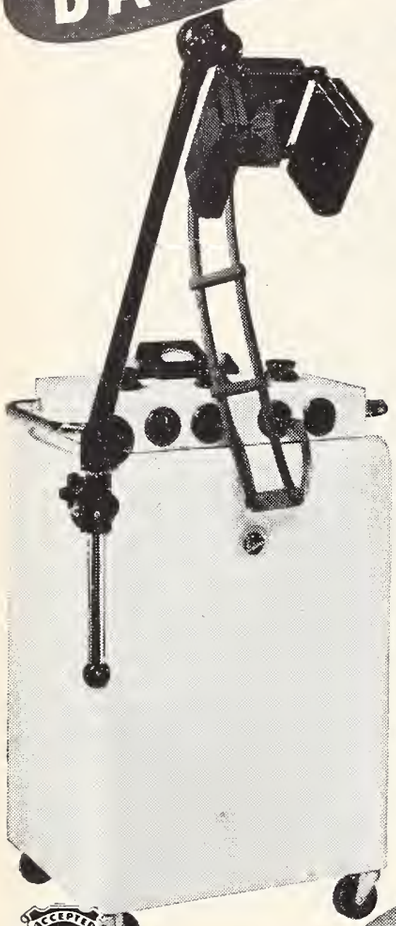

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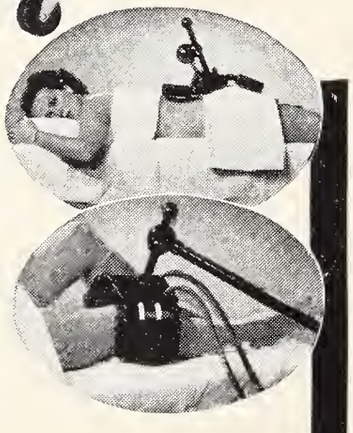

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everyone who has a genuine interest in curing the sick and in relief of human suffering, is to make sure that our doctors continue to be free so we shall continue to have the highest standards of medical care the world has ever known.

Sincerely,
HARRY F. KELLY

New York, N. Y.
July 28, 1950

To Editors of Medical Journals:
Dear Sirs:

As you may be aware, parathion (O, O-diethyl O-p-nitrophenyl thiophosphate) is being widely employed as an insecticide throughout agricultural communities in the United States and elsewhere because of its efficacy in its field. Unfortunately, this compound, like many other pesticides, is highly toxic for man. Numerous cases of poisonings and a few deaths have occurred from its careless application.

We have endeavored to acquaint physicians throughout the country with the toxicology and treatment of parathion poisoning.

There will shortly appear in the J.A.M.A. a report of the Committee on Pesticides, dealing with the toxicity of the organic phosphates of which parathion is one.

If further information on the subject of parathion poisoning is desired, we will be glad to send you a paper on this subject which has been submitted for publication, written by Dr. J. F. Marchand and the undersigned.

Very truly yours,
AMERICAN CYANAMID COMPANY
D. O. HAMBLIN, M.D.
Medical Director

Muskegon, Michigan

Editor
Journal of the Michigan State Medical Society
610 Post Building
Battle Creek, Michigan
Dear Sir:

From data obtained in recent surveys, it is apparent that besides the million known diabetics in the United States, there are another million who do not know they are victims of the disease.

If these cases could be discovered before they become more severe, and treatment instituted, the chances of the disease becoming severe and the incidence of complications would be minimized.

For the past three years the American Diabetes Association has been conducting campaigns aimed at the early discovery of these cases, and so far it is apparent that the campaign has been successful.

By far the most important part of the campaign is the education of the public. This program is carried out through the newspapers, magazines, radio, and group lectures, the purpose being to acquaint the public with the symptoms and signs of diabetes, and the methods of discovery and treatment. Anyone who has suspicious symptoms is urged to see the family doctor at once.

In order to make the campaign more effective, the

week of November 12 to 18, 1950, has been designated Diabetes Week, during which special emphasis will be given the problem.

Will you be so kind as to give our campaign some space in your October or November issue?

Sincerely yours,
WILLIAM M. LEFEVRE, M.D.,
Chairman
Sub-committee on Diabetes, MSMS

Windsor, Ontario
June 24, 1950.

L. Fernald Foster, M.D.
919 Washington Avenue,
Bay City, Michigan.
Dear Sir:

I have just received your May publication of THE JOURNAL of the Michigan State Medical Society in the mail, and read with special interest the article which I had hoped to see, and which you so kindly marked, on the Clinical Uses of Endocrine Products in Gynecology.

All topics are indeed interesting and particularly practical. I am glad to see a journal so largely devoted to practice in preference to theory.

I have just spent an enjoyable time on a warm afternoon reading of the exploits of the remarkable Avicenna-philosopher and surgeon.

Thank you very much for this copy.

Sincerely,
P. G. CROZIER, M.D.
Chrysler Corporation of Canada

Washington, D. C.
August 8, 1950

Doctor Wilfrid Haughey, Editor
The Journal of the
Michigan State Medical Society
610 Post Building
Battle Creek, Michigan
Dear Doctor Haughey:

On page 766 of your July issue, you refer to Ewing's gripe about the $3 million he says the AMA spent to defeat Socialized Medicine.

I assume whatever you spent was your own money.

Oscar not only draws a salary from Uncle Sam but at times travels around at Government expense making speeches for his Plan, much of the material for which has been prepared by other Federal employees.

And, I have heard Oscar testify in substance that he not only had the legal right to do so but that it was his duty.

Sincerely yours,
CLARE E. HOFFMAN
Representative, 4th District, Michigan

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. . . . . NEWS MEDICAL

Frank T. Moran, M.D., of Romeo was elected State Commander of the Michigan Amvets (American Veterans of World War II) at their annual three-day convention in Lansing on Sunday, June 23. Congratulations, Dr. Moran!

— Vote November 7 —

Conference of Chairmen of State Industrial Health Committees.—At the suggestion of Max R. Burnell, M.D., Detroit, chairman of the MSMS Industrial Health Committee, the AMA has invited the chairmen of the State Committees on Industrial Health to meet on the occasion of the eleventh Annual Congress on Industrial Health of the AMA. Such an interchange of experiences between the state chairmen over the country will be beneficial to the individual state medical societies, to the American Medical Association, and to industrial medicine and surgery as a whole.

— Get Out The Vote —

ACP.—A copy of the preliminary bulletin of postgraduate courses arranged by the American College of Physicians, for the autumn of 1950, is available by writing Executive Secretary E. R. Loveland, 4200 Pine Street, Philadelphia 4, Pa.

— Vote November 7 —

The first Medical Conference at Grayling, Michigan, sponsored by the Medical Society of the North Central Counties, the Central Michigan Committee of the Michigan Regional Committee on Trauma of the American College of Surgeons, and the Medical Personnel of the Michigan National Guard, was held August 16 at the Officers Club, Hanson Military Reservation, Lake Margrethe.

C. R. Keyport, M.D., Past President of the Michigan State Medical Society, acted as chairman and introduced the speakers including Frederick D. Goudie, M.D., Detroit; Major General Ralph A. Loveland, Commandant; Lieutenant Colonel Morrison D. Beers, M.C., Detroit; and George J. Curry, M.D., Flint.

— Get Out The Vote —

"Ewing Reveals How New Deal Lobby Operates" was the title of a news story in the *Chicago Daily Tribune* of July 29 in which a report on the European Tour and U. S. Speeches of Federal Security Administrator Oscar R. Ewing, was given.

Mr. Ewing "was a reluctant and indignant witness as Representative Halleck and Representative Brown pried testimony from him concerning the manner in which pressure has been put upon Congress by his Agency in behalf of President Truman's socialized medicine program," according to the *Tribune.*

"The activities scrutinized included a six weeks' trip to Europe (an official mission, not a junket, Ewing emphasized); thirty-three speeches throughout the nation prepared with the help of sixty-five full-time government press agents; the formation of a private corporation by agency employes to finance a $45,000 'National Health Assembly' in Washington; and a luncheon for private organization workers at which government employes served as waiters."

The news story was followed by an editorial in the *Chicago Daily Tribune* of August 3 on the same subject, which in part stated "Ewing admitted to having the assistance of sixty-five full-time publicity men, paid by the taxpayers."

— Vote November 7 —

A Crack Worth Repeating.—Columnist Dorothy Thompson ended one of her recent syndicated newspaper articles with a crack that is worth repeating, according to Geo. F. Lull, M.D., AMA Secretary.

Recounting some of the inadequacies and unpreparedness in the Korean situation, she said:

"Our leaders perennially refuse to analyze the minds of this country's enemies. They cannot remember twenty-one years back, nor do they read even what is all written down.

"Alternately, they coaxingly patronize the greatest emperor of all the Russians, as 'Uncle Joe,' or, repulsed, pettishly cry, 'barbarian bandit!' And then when the inevitable happens, they are caught holding, not a gun, but a public health program."

— Get Out The Vote —

The Michigan Crippled Children Commission has appointed a medical advisory committee to aid it in various matters under the Afflicted and Crippled Children Acts, and in cases of medical procedure and in rules, etc. The personnel of the committee is Grover C. Penberthy, M.D., Detroit, C. E. Badgley, M.D., Ann Arbor, Frank Van Schoick, M.D., Jackson, and W. H. Steffensen, M.D., Grand Rapids.

— Vote November 7 —

THE FIFTEENTH ANNUAL ASSEMBLY OF THE UNITED STATES CHAPTER OF THE INTERNATIONAL COLLEGE OF SURGEONS will be held in Cleveland, Ohio, October 31 to November 3, with headquarters at the Cleveland Hotel.

Surgical clinics will be held in several Cleveland hospitals on Monday, October 30. All scientific sessions will be held at the Cleveland Public Auditorium 9:00 a.m. to 5:00 p.m. Tuesday through Friday. An excellent program has been arranged at which time some of the most prominent surgeons of America, and some foreign speakers, will discuss the current contemporary surgical scene.

(Continued on Page 1112)

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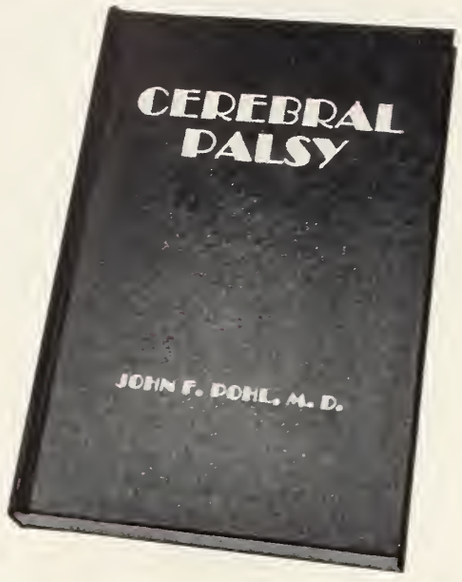

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• • •

Dr. John F. Pohl is a Diplomate of the American Board of Orthopedic Surgery and is orthopedic surgeon at the Michael Dowling School for Crippled Children. He is also the author of "The Kenny Concept of Infantile Paralysis and Its Treatment," thousands of copies of which have been sold throughout the world.

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(Continued from Page 1110)

Through the courtesy of Smith, Kline and French Laboratories, a fine colored television program of surgical procedures, originating from the St. Vincent's Charity Hospital, Cleveland, will be shown daily in the auditorium from 9:00 a.m., to 1:00 p.m. Motion pictures will also be presented each day depicting many of the recent advances in surgery and surgical technique.

One of the highlights of the meeting will be the annual banquet at the Statler Hotel on Thursday evening when America's great surgeon, Frank H. Lahey, M.D., of Boston, will talk on "Some of the Recent Advances in Surgery."

Elmer L. Henderson, M.D., Louisville, Ky., President of the American Medical Association, will deliver an address on "The Importance of International Co-operation in Surgery."

Preliminary programs may be obtained from the Secretary's office, 1516 Lake Shore Drive, Chicago 10.

— Get Out The Vote —

The 78th Annual Meeting of the American Public Health Association will be held in Kiel Auditorium, St. Louis, Mo., October 30-November 3, 1950. For program write Reginald M. Atwater, Executive Secretary, 1790 Broadway, New York 19.

— Get Out the Vote —

A New Racket: The National Better Business Bureau sends news of widespread theft of television sets by fake service representatives. Employing a door-to-door approach, these individuals who claim to be from recognized firms, gain admission to a house by representing themselves as "inspectors." They use scare tactics by advising the housewife that unless her set is removed to the factory and repaired, it will blow up or break down completely; the housewife who obligingly lets her set go, doesn't realize that she will never see it again.

If such an "inspector" visits your neighborhood, demand to see the credentials and be sure to check the license number of the vehicle used by these so-called service men and notify the nearest police station immediately.

— Vote on November 7 —

"Diseases of the Gastro-Intestinal Tracts, Liver and Pancreas" will be presented by the Chicago Medical Society, in honor of its 100th Anniversary, as a postgraduate course during the week of October 23; "Diseases of the Heart, Kidney and Blood Vessels" will be offered the week of October 30. Both courses will be at Thorne Hall, Northwestern University Medical School, Lakeshore Drive and Superior Street, Chicago. For information, write Committee on Postgraduate Medical Education, Chicago Medical Society, 30 N. Michigan Ave., Chicago 2.

— Get Out the Vote —

The Ingham County Medical Society, in June, 1950, adopted a motion "that the Executive Committee of the Ingham County Medical Society recommend to the Society that a resolution be passed recommending to the local pharmaceutical associations the discontinuance of the distribution of physicians blanks carrying the names and addresses of individual pharmacies, and that the Association distribute blanks carrying on the reverse a statement as follows: 'Your prescriptions will be properly compounded in pharmacies displaying this emblem'; the emblem being the seal of the local pharmaceutical association."

— Vote on November 7 —

Guest Speakers at the 1950 Annual Meeting of the State Medical Society of Wisconsin in Milwaukee were: Jerome Conn, M.D., Ann Arbor, and Joseph A. Johnston, M.D., Detroit. Dr. Conn's subject before the general session was "The Selye Alarm Reaction in Clinical Medicine" and before the Internal Medicine Section "Medical Implication of ACTH and Cortisone." Dr. Johnston addressed the general session on the subject of "Special Problems of the Adolescent Child" and the Pediatric Section on "The Factors which Affect Growth as Measured by Nitrogen and Calcium Studies."

— Get Out the Vote —

H. W. Brenneman, MSMS Public Relations Counsel, will be guest speaker at the 1950 Michigan Commercial Secretaries Association meeting in Manistee on October 6. His subject: "Michigan's Good Citizenship Campaign."

— Vote on November 7 —

The Bruce Publishing Company, St. Paul, Minnesota, long-time publisher of The Journal of the Michigan State Medical Society, contributed the attractive and useful notebooks presented to every registrant at the MSMS Annual Session, Detroit, September, 1950.

Many thanks, Bruce Publishing Company.

— Get Out the Vote —

Saul Rosenzweig, M.D., of Detroit, has been appointed by W. W. Babcock, M.D., President of the Wayne County Medical Society, as Chairman of the Rheumatic Fever Control Center in Wayne County.

Congratulations, Dr. Rosenzweig!

— Vote November 7 —

The Annual Coller-Penberthy Medical and Surgical Conference, sponsored by the Grand Traverse-Leelanau-Benzie County Medical Society, was a successful meeting held in Traverse City, July 27-28, 1950. A total of 118 registered to hear H. H. Riecker, M.D., Ann Arbor, Cameron Haight, M.D., Paul S. Barker, M.D., Edgar Kahn, M.D., Harry Towsley, M.D., Reed M. Nesbit, M.D., A. C. Curtis, M.D., C. D. Badgley, M.D., A. C. Furstenburg, M.D., and F. A. Coller, M.D., all of Ann Arbor, and Grover C. Penberthy, M.D., L. A. Reynolds, M.D., R. M. McKean, M.D., all of Detroit, and Philip D. Wilson, M.D., New York City, on Thursday.

The Friday program consisted of a medical and a surgical conference, running concurrently at the James Decker Munson Hospital and Central Michigan Children's Clinic.

Among the eminent guests were: Dr. A. G. Ruthven,

University of Michigan President, and Mr. Peter Raper of England.

M. F. Osterlin, M.D., Traverse City, was General Chairman of the 1950 Conference.

— Get Out the Vote —

Arthur E. Schiller, M.D., Detroit, was elected President, Eugene A. Hand, M.D., was chosen as President-elect, Charles J. Courville, M.D., Detroit, was made Secretary-Treasurer, and Roy Herbert Holmes, M.D., Muskegon, was elected Recorder of the Detroit Dermatological Society for the year 1951 at its recent annual meeting.

— Vote November 7 —

The American Urological Association offers an annual award of $1,000 (first prize of $500, second prize of $300, and third prize of $200) for essays on the result of some clinical or laboratory research in Urology. Competition is limited to urologists in practice for not more than five years and to men in training to become urologists. For full particulars write Charles H. de T. Shivers, Boardwalk National Arcade Bldg., Atlantic City, N. J. Essays must be in his hands before February 10, 1951.

— Get Out the Vote —

L. Fernald Foster, M.D., Bay City, MSMS Secretary, spoke at the Oakland County Press Conference in Pontiac on May 24; he addressed the Monroe County Medical Society on "Public Relations Begin in the Individual Doctor's Office" on June 6; his subject for the Muskegon Kiwanis Club on August 8 was "The National Health Picture." Dr. Foster gave the dedicatory address on the occasion of the opening of the new Marshall B. Lloyd Hospital in Menominee, Michigan, on August 10.

— Vote November 7 —

AMA Membership Fees.—The House of Delegates at San Francisco fixed the membership dues for 1951 at $25.00. This includes a subscription to the Journal. Fellowship in the Scientific Assembly is continued with dues set at $2.00 per year. **Fellows** may elect to take one of the special Journals in lieu of the *American Medical Association Journal.*

— Get Out The Vote —

AMA Survey.—Charles Sawyer, Secretary U. S. Department of Commerce, wrote a letter of thanks to the AMA. "I want you to know that as a result of the very fine and effective co-operation of the AMA and its constituent and component societies this 1950 survey has been an outstanding success. We have already received better than 40 per cent response from our mailing, which is I believe impressionable in a voluntary survey of this kind."

— Vote November 7 —

Physicians' Fees and Health Service.—A recent government survey made public July 26, 1950, does not agree with Oscar Ewing. This survey reports that only one-third of the money spent for health purposes goes to the physician in payment for his services. The report

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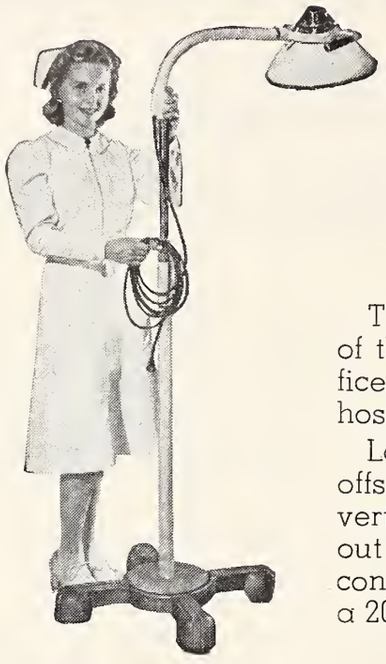

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covering 1949 was that 1.2 per cent of all money spent on American families for consumer goods and services goes to Doctors of Medicine; 2.06 per cent of the total goes for other health expenses, and this does not include non-private hospitals, U. S., state and local.

The public spent during the twelve months $2,267,000,000 for M.D. services, $1,391,000,000 on drugs, $105,000,000 on private nurses, $416,000,000 on orthopedics and procedure and appliance, and $1,631,000,00 on private hospitals. If non-private hospitals had been included, this figure would be several times as high.

This report is from the Commerce Department Survey of Current Business.

— Get Out The Vote —

Franklin H. Top, M.D., Director of the Herman Keefer Hospital, Acting Head and Clinical Professor of Preventive Medicine and Public Health at the Wayne University College of Medicine at Detroit and Lecturer of Epidemiology at the Public Health School of University of Michigan, has terminated these positions as of September 1, to become Professor of Epidemiology in the school of Public Health and Professor of Pediatrics at the University of Minnesota Medical School.

— Vote November 7 —

Detroiters Elected.—Warren B. Cooksey, M.D., and Mr. Frank N. Isbey, two of Detroit's civic leaders, have been elected to the Board of Directors of the American Heart Association, according to announcement made by Paul Barker, M.D., of Ann Arbor, President of the Michigan Heart Association.

Dr. Cooksey was instrumental in the formation of the Michigan Heart Association, and he served as its first president. During his term of office he guided the development of the Michigan Heart Association into being Michigan's most prominent and one of the nation's most active organizations fighting diseases of the human heart and circulation.

Mr. Isbey, too, was active in the organization of the Michigan Heart Association, and he directed the fund-raising activities of the Association in 1949. This was a limited fund drive to make the activities of the Michigan Heart Association known to the people of this State. Principal financial support of the Michigan Heart Association is derived from contributions to the United Health and Welfare Fund of Michigan.

Both Dr. Cooksey and Mr. Isbey are members of the Board of Directors of the United Foundation in addition to being members of the Board of Trustees and the Executive Committee of the Michigan Heart Association.

Dr. Barker also announced that two other Michigan men were elected to important positions in the American Heart Association. Mr. C. E. Wilson, President of the General Motors Corporation and Chairman of the Board of Trustees of the Michigan Heart Association, was elected Delegate-at-Large to the Assembly, the over-all governing body of the American Heart Association. Frank M. Wilson, M.D., of Ann Arbor was elected Vice Chairman of the Association's Scientific Council. The Council is responsible for research and other scientific activities in the cardiovascular field.

— Get Out the Vote —

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(Continued from Page 1114)

Army Begins Mandatory Call-up of Individual Medical Reserve Officers.—Effective August 11, 1950, the Army announced it had started to call to active duty individual members of its medical reserve corps. Immediate requirements were given as 734 physicians, all of whom must report for duty by October 1 at the latest. The Army also is issuing mandatory calls to 343 reserve dentists, 92 veterinary corps officers and 455 medical service corps officers. An Army spokesman emphasized that *these men will have to be called regardless of pending legislation for draft of A.S.T.P. and other doctors who have not served.* He said passage of such legislation would take considerable time, and that the need for physicians is urgent.

Following is the procedure:

1. The Surgeon General's Office has determined military medical needs, including totals of various specialists required.
2. Each Army command in continental U. S. has been ordered to supply a definite quota of reserves of specified skill and rank; as a safeguard to the civilian population, and to insure a "fair and equitable" distribution of call-up orders, totals for each Army area are based on the physician density in that particular area.
3. Army commanders will select the particular reserve officers to be called up from their areas, with consideration given to past military service records.
4. By September 10, Army commanders must report names of men so selected to the Surgeon General's Office, which will make assignment recommendations.
5. Commanders may not call up medical reserves from internships, from residencies or from full-time postgraduate courses. However, commanders may use their own discretion in the case of medical reserves engaged in research "considered necessary to maintenance of the national health, safety or interest," and those whose call to active duty might jeopardize the health of the communities in which they reside.

In making selections, Army Commanders have been ordered to "make every effort" to enlist the co-operation of established medical societies, and "wherever feasible" to consult with senior reserve medical officers.

Despite its action August 11, Army is continuing every effort to obtain volunteers. Volunteers from now on count against each Army's quota, thereby reducing the number of officers who must be called involuntarily from that area. Also, Army points out that medical officers who volunteer for active duty still are eligible for an additional $100 per month pay, which is not granted to men entering service on mandatory orders. However, under a new ruling all reserves going on active duty—voluntarily or involuntarily—keep their reserve rank.

— Vote November 7 —

Bureaucratic Methods.—"Ewing is the most vigorous propagandist of the day in the cause of political medicine. Twice Mr. Truman has tried to get him elevated to a cabinet job in charge of health, education and security." Under the searching examination of Rep. Clarence Brown, Ohio Republican, there was nothing for Ewing to do but to put on a bold front, "and this Ewing did, proclaiming that it was 'not only his right but his duty' to propagandize in favor of the Truman compulsory medical insurance plan.

"In this mission Ewing admitted to having the assist-

(Continued on Page 1118)

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(Continued from Page 1116)

ance of 65 full time publicity men, paid by the taxpayers. He conceded that he had made 33 major speeches so far this year, and, with five assistants, had canvassed eight foreign countries.

"One of the most important disclosures was that Ewing inspired the creation of a false front organization which was given the high sounding name of the National Health Assembly, Inc., to give himself a forum for promoting state medicine. Ewing installed his brother-in-law and a group of FSA officials as officers of this supposedly private organization, and, with much fanfare, held a four-day congress in Washington under its supposed auspices in May, 1948.

"Before the 'assembly' opened its program, Ewing was well along on a 'report to the President,' supposedly based on its deliberations. Fifty-nine thousand copies of the report were printed at an expense to the public of $20,000 in order to propagandize political medicine."—*Chicago Tribune.*

— Get Out the Vote —

Michigan Authors:

Paul Wallace, M.D., Ann Arbor, Michigan, published a paper, "Treatment of Fractures with Long-standing Osteomyelitis: Results of Use of the Tibial Sliding Graft," in *Archives of Surgery,* August, 1950.

Carey P. McCord, M.D., Detroit, Michigan, published a paper, "Occupational Disease Manifestations in Dental Impairments," in *The Journal of Medicine in Industry,* August, 1950.

Arthur B. McGraw, M.D., F.A.C.S., Detroit, will present a paper, "Surgical Aspects of Meckel's Diverticulum," Wednesday, November 1, 1950, at the Fifteenth Annual Assembly of the International College of Surgeons, United States Chapter, at Cleveland, Ohio.

Meyer O. Cantor, M.D., Detroit, on "Digestive Tract: Decompression" which appeared in Medical Physics, Volume II, 1950.

Reed M. Nesbit, M.D., and **William C. Baum, M.D.,** Ann Arbor, on "Prostatic Carcinoma" in JAMA, August 12.

— Get Out the Vote —

The Western Michigan Pediatrics Society was recently organized to hold four scientific meetings each year.

At the April meeting in Grand Rapids on the 19th of that month, C. R. Leininger, M.D., fellow in cardiology at the Children's Memorial Hospital in Chicago, presented a paper, "Methods of Diagnosis of Congenital Heart Disease."

Charron said: "He who receives a good turn should never forget it; he who does one should never remember it."

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Asknowledgment of all books received will be made in this column, and this will be deemed by us as a full compensation to those sending them. A selection will be made for review, as expedient.

THE MERCK MANUAL OF DIAGNOSIS AND THERAPY. A Source of Ready Reference for the Physician. Eighth Edition. Rahway, N. J.: Merck & Co., Inc., 1950. Price $4.00.

THE PRACTICE OF MEDICINE. By Jonathan Campbell Meakins, C.B.E., M.D., LL.D., D.Sc., formerly Professor of Medicine and Director of the Department of Medicine, McGill University; formerly Physician-in-Chief, Royal Victoria Hospital, Montreal; formerly Professor of Therapeutics and Clinical Medicine, University of Edinburgh; Fellow of the Royal Society of Edinburgh; Fellow of the Royal Society of Canada; Fellow of the Royal College of Physicians, London; Fellow of the Royal College of Physicians, Edinburgh; Honorary Fellow of the Royal College of Surgeons, Edinburgh; Fellow of the Royal College of Physicians, Canada; Fellow of the American College of Physicians; Honorary Fellow of the Royal Society of Medicine. Fifth Edition. With 518 illustrations including 50 in color. St. Louis: C. V. Mosby Co., 1950. Price $13.50.

TECHNIQUES IN BRITISH SURGERY. Edited by Rodney Maingot, FRCS. Illustrated. 734 pages with 473 figures. Philadelphia and London: W. B. Saunders Co., 1950. $15.00.

A TEXTBOOK OF GYNECOLOGY. By Arthur Hale Curtis, M.D., Emeritus Professor and Chairman of the Department of Obstetrics and Gynecology, Northwestern University Medical School; and John William Huffman, M.D., Associate Professor of Obstetrics and Gynecology, Northwestern University Medical School; Attending Gynecologist, Passavant Memorial Hospital, Chicago. Sixth Edition. 799 pages with 466 illustrations, chiefly by Tom Jones, including 37 in color. Philadelphia: W. B. Saunders Co., 1950. Price $10.00.

PHYSICIAN'S HANDBOOK. By Marcus A. Krupp, M.D., Assistant Clinical Professor of Medicine, Stanford University School of Medicine; Director, Clinical Pathology, Veterans Administration Hospital, San Francisco; Norman J. Sweet, M.D., Assistant Professor of Medicine, University of California School of Medicine, San Francisco; Charles D. Armstrong, M.D., Clinical Instructor in Medicine, Stanford University School of Medicine. Sixth Edition. Palo Alto, Calif.: University Medical Publishers. Price $2.50.

VOCATIONAL REHABILITATION OF PSYCHIATRIC PATIENTS. By Thomas A. C. Rennie, M.D., Cornell University Medical College and The New York Hospital; Temple Burling, M.D., and Luther E. Woodward, Ph.D., Division on Rehabilitation, The National Commitee for Mental Hygiene. New York: The Commonwealth Fund, 1950.

ACTH—Armour Laboratories.

THE ANTIHISTAMINES. Their Clinical Application. By Samuel M. Feinberg, M.D., Associate Professor of Medicine, Chief of Division of Allergy and Director of Allergy Research Laboratory; Saul Malkiel, Ph.D., M.D., Assistant Professor of Medicine, Director of Research, Allergy Research Laboratory, Alan R. Feinberg, M.D., Clinical Assistant in Medicine. Attending Physician in Allergy Clinic. Northwestern University Medical School. Chicago: The Year Book Publishers, Inc., 1950. Price $4.00.

ESSENTIALS OF MEDICINE. The Basis of Nursing Care. Charles Phillips Emerson, Jr., A. B., M.D., Associate Professor of Medicine, Boston University School of Medicine; Member, Robert Dawson Evans Memorial Laboratory; Visiting Physician and Physician in Charge of Clinical Laboratories, Massachusetts Memorial Hospitals; Attending Physician, Cushing Veterans Administration Hospital, and Medical Consultant, American Red Cross. Jane Elizabeth Taylor, R.N., B.S., M.Ed. Lecturer, Frances Payne Bolton School of Nursing, Western Reserve University; Formerly Nursing Education Consultant, U. S. Public Health Service; Formerly Assistant Professor of Medical Nursing, Yale University School of Nursing, and Assistant in Charge of Medical Nursing, New Haven Hospital. Sixteenth Edition, Revised and Reset. 191 illustrations, including 5 subjects in full color. Philadelphia: J. B. Lippincott Co., 1950. Price $4.00.

HUMAN STERILIZATION. Techniques of Permanent Conception Control by Robert Latou Dickinson, M.D., and Clarence James Gamble, M.D.

MEDICAL DIAGNOSIS—Applied Physical Diagnosis. Edited by Roscoe L. Pullen, M.D., F.A.C.P., Professor of Graduate Medicine, Director of the Division of Graduate Medicine, and Vice Dean of the School of Medicine, Tulane University of Louisiana; Senior Visiting Physician, Charity Hospital of Louisiana at New Orleans; Consultant in Medicine, Veterans Administration Hospital, New Orleans, Louisiana; Consultant to the Surgeon General, Department of the Army, Washintgon, D. C. Second Edition. 1119 pages with 601 figures, 48 in color. Philadelphia and London: W. B. Saunders Co., 1950. Price $12.50.

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A TEXT BOOK OF X-RAY DIAGNOSIS. By British Authors. Four volumes. Second Edition. Edited by S. Cochrane Shanks, M.D., F.R.C.P., F.F.R., Director, X-Ray Diagnostic Department, University College Hospital, London, and Peter Kerley, M.D., F.R.C.P., F.F.R., D.M.R.E., Director, X-Ray Department Westminster Hospital; Radiologist, Royal Chest Hospital, London. Volume LV. 553 illustrations. Philadelphia: W. B. Saunders Co., 1950.

PRINCIPLES OF PUBLIC HEALTH ADMINISTRATION. By John J. Hanlon, M.S., M.D., M.P.H., Associate Professor of Public Health Practice, School of Public Health, University of Michigan, and Chief Medical Officer and Associate Chief of Party, Bolivia, The Institute of Inter-American Affairs. Price $6.00. 48 illustrations. St. Louis: C. V. Mosby, 1950.

SURGICAL NURSING. By Eldridge L. Eliason, A.B., M.D., Sc.D., F.A.C.S. Emeritus John Rhea Barton Professor of Surgery, University of Pennsylvania School of Medicine; Emeritus Professor of Surgery, University of Pennsylvania Graduate School of Medicine; Consulting Surgeon, Hospital of the University of Pennsylvania, Presbyterian and Philadelphia General Hospitals; L. Krafer Ferguson, A.B., M.D., F.A.C.S. Professor of Surgery, Graduate School of Medicine of the University of Pennsylvania and Woman's Medical College of Pennsylvania; Surgeon, Graduate of Hospital of the University of Pennsylvania, Hospital of the Woman's Medical College of Pennsylvania, Philadelphia General Hospital and Doctors Hospital; Consulting Surgeon, Frankford Hospital and U. S. Naval Hospital, Philadelphia; Lillian A. Sholtis, R.N., B.S., M.S. Assistant Professor of Surgical Nursing, Yale University School of Nursing, formerly Supervisor of Operating Rooms, Hospital of the University of Pennsylvania. Ninth Edition, revised and reset. 336 illustrations, including 9 subjects in full color. Philadelphia: J. B. Lippincott Co., 1950. Price $4.00.

PRACTICAL GYNECOLOGY. The Role of Gynecology in General Medicine. By Walter J. Reich, M.D., F.A.C.S., F.I.C.S. Attending Gynecologist, Cook County Hospital, Professor of Gynecology, Cook County Graduate School of Medicine; Attending Gynecologist, Fantus Clinics of the Cook County Hospital; Assistant Professor of Gynecology, Chicago Medical School; Attending Gynecologist and Obstetrician, Grant Hospital; Attending Gynecologist, Fox River Tuberculosis Sanatorium; Consulting Gynecologist, Hazelcrest General Hospital. Mitchell J. Nechtow, M.D.; Associate Attending Gynecologist, Cook County Hospital and the Fantus Gynecologic Clinic; Assistant Clinical Professor of Gynecology, Cook County Graduate School; Associate in Gynecology and Obstetrics, Chicago Medical School; Attending Gynecologist and Obstetrician, Norwegian American Hospital. 187 illustrations, including 55 subjects in color. Philadelphia: J. B. Lippincott Co., 1950. Price $10.00.

THE GENEALOGY OF GYNAECOLOGY. History of the Development of Gynaecology Throughout the Ages. 2000 B. C.—1800 A.D. With excerpts from the many authors who have contributed to the various phases of the subject. By James V. Ricci, A.B., M.D. Clinical Professor of Gynaecology and Obstetrics, New York Medical College; Director of Gynaecology, City Hospital, New York; Attending Gynaecologist and Obstetrician, Flower and Fifth Avenue Hospitals; Consultant in Gynaecology and Obstetrics, Beckman-Downtown Hospital; Consultant in Gynaecology and Obstetrics, Columbus Hospital; Fellow of the New York Academy of Medicine; Honorary Member of the Italian Society of Medical History and the Natural Sciences. Department of Gynaecology and Obstetrics, New York Medical College City Hospital Division. Second Edition, enlarged and revised. Philadelphia: The Blakiston Co., 1950. Price $8.50.

TEXTBOOK OF ENDOCRINOLOGY. Edited by Robert H. Williams, M.D., Executive Officer and Professor of Medicine, University of Washington Medical School, Seattle. With the collaboration of Peter H. Forsham, Harry B. Friedgood, John Eager Howard, Edwin J. Kepler, William Locke, L. Harry Newburgh, Edward C. Reifenstein, Jr., William W. Scott, George Van S. Smith, George W. Thorn, Lawson Wilkins. 793 pages. 168 illus. Philadelphia: W. B. Saunders Co., 1950. Price $10.00.

The editor has secured the collaboration of an outstanding group of contributors. The text is printed on a good grade of paper; the index is complete.

The book contains sections on each of the endocrine glands and chapters covering special subjects: Influence of Endocrine Glands upon Growth and Development, Neuroendocrine and Psychodynamic Aspects of the Endocrinopathies, Obesity, Laboratory Diagnostic and Assay Procedures. The diagrams, which clarify points brought out in the text, are easily visualized and understood.

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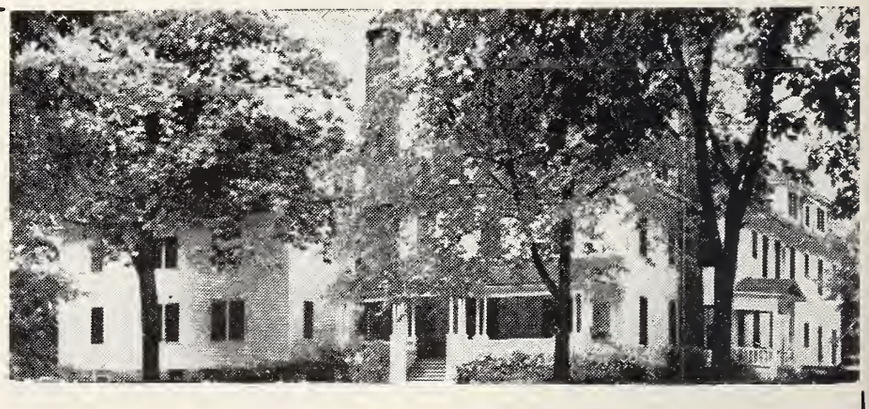

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voted to Physiology and Biochemistry. The discussion of Carbohydrate Metabolism is especially well done, as is the discussion of Adrenal Physiology. Each section has been well covered in these fields.

This, in my opinion, is a clear, concise textbook to which one could turn for information on the physiology of the endocrine glands, and diagnosis and treatment of their disturbances. It should be in every medical student's and physician's library. L.P.S.

HISTOLOGY. Arthur Worth Ham, M.B., Professor of Anatomy, in charge of Histology, in the Faculties of Medicine and Dentistry, University of Toronto, Canada. 445 illustrations, including 4 plates in color. Philadelphia: J. B. Lippincott Co., 1950. Price $10.00.

This is a handsome volume and its content is not limited to histology, for considerable space is given to physiological and pathological correlation. The introductory chapters are excellent and embrace basic microscopy, artefacts, and histological technique, some of which one feels might have been previously encountered in premedical biology. Such physiological principles as the mechanism of reflex, and the interchange of intercellular fluids, are discussed under histological headings.

The illustrations are particularly good, and the advantage of photographs over the sketches formerly employed in such texts on histology is very obvious. They are also accompanied by good schematic drawings. Photomicrographs, taken by the phase method, convey some new and interesting interpretations of the architecture of the spleen.

The chapter on bone changes is good and is valuable to the graduate student, in that it clarifies some of the more recent advances in arthritis. That portion of the book devoted to the blood is not remarkable, but is treated better than in most histologies, but it is unfortunate that there is no correlation with the new nomenclature. The terminology is somewhat *sui generis* and consequently confusing. The section on clotting and platelets is particularly good.

The book is recommended to all students and to all physicians, particularly those specialists who are interested in pathology and lack an adequate histological background.

A.A.H.

WE PASS THIS WAY. By Charles A. Cooper, M.D. New York: Exposition Press, 1950. Price $3.50.

Another Michigan doctor has written a novel. Dr. Charles A. Cooper, formerly of Trimountain and Hancock, now living in Stambaugh, practiced in the mining and industrial districts of the Northern Peninsula and knows the life and times of the first and second World Wars and the trying times between. He has adopted a number of these families and traced their lives, ambitions, disappointments and disasters through the building up of trade unionism. He tells vividly and understandingly of the tribulations of the victims of industrial strife. Family life is pictured, with emphasis on the common man and his problems.

This is an interesting and well-written novel, that will fill a pleasant half day, and will leave the reader food for thought.

PLASTIC AND RECONSTRUCTIVE SURGERY. A Manual of Management. By Ferris Smith, M.D., F.A.C.S., Consultant in Plastic Surgery, Blodgett Memorial Hospital, Grand Rapids, Michigan. 895 pages with 532 figures. Philadelphia: W. B. Saunders Co., 1950. Price $15.00.

Ferris Smith, in this extensive, well-printed, and well-illustrated manual, has pointed out and emphasized the tried and true procedures, as well as the don'ts, in modern plastic surgery. This book will long be of value as a reference for the general surgeon as well as for those practicing in the specialized branches of surgery. It will be indispensable to the young surgeon during his preceptorship in plastic surgery. This is a major textbook by a Michigan doctor.

This book is highly recommended by the reviewer.

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HEMAGGLUTINATION TEST FOR RHEUMATOID ARTHRITIS

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hemagglutinating factor could be differentiated from heterophile antibodies and from streptococcal antibodies. It is heat labile and is not destroyed by lipid extraction. It is associated with the serum globulins. However, several investigators have indicated that the factor is not itself an antibody.

In preliminary studies we have been able to demonstrate that the hemagglutination factor is not associated with purified mucoprotein. This observation appeared to be of interest in view of unpublished data of this laboratory showing that certain plasma mucoproteins appear in increased amounts in patients with rheumatoid arthritis. Further investigation is required to elucidate the nature of the hemagglutinating factor.

The effect of steroid therapy on the hemagglutination titers is also of interest. Although we have only studied the effect of cortisone on the titers of four patients, it appeared that during and after cortisone administration the hemagglutination titers were not significantly altered.

At the present time the hemagglutination test for rheumatoid arthritis appears to be highly specific and of value in active cases with joint changes, and of limited value in presumptive cases. The nature of the reaction and the usefulness of the reaction to follow the effect of therapeutic agents requires further investigation.

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VOLUME 49 OCTOBER, 1950 NUMBER 10

Contributors to this Issue

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H. J. VANDENBERG, M.D.

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Delegates
L. G. Christian, M.D., Lansing.....1951
W. A. Hyland, M.D., Grand Rapids 1951
W. D. Barrett, M.D., Detroit.....1952
W. H. Huron, M.D., Iron Mountain 1952
R. L. Novy, M.D., Detroit.....1952

Alternates
H. H. Cummings, M.D., Ann Arbor 1951
E. C. Texter, M.D., Detroit.....1951
R. A. Johnson, M.D., Detroit.....1952
R. H. Denham, M.D., Grand Rapids 1952
C. I. Owen, M.D., Detroit.....1952

REGARDLESS OF INDICATED THERAPY

Nutrition is a Primary Factor

Whether the condition under treatment is an acute infection, a bowel upset, an injury or a metabolic derangement, nutrition is always a primary factor in therapy. Regardless of other indicated measures, nutritional adequacy is essential for prompt recovery.

When dietary supplementation is the indicated means of increasing the nutrient intake, the food drink, Ovaltine in milk, can prove highly beneficial. Providing significant amounts of all nutrients considered essential, it virtually assures dietary adequacy when the recommended three glassfuls daily are taken in conjunction with even a fair diet.

Temptingly delicious and readily digested, this dietary supplement fits well into the framework of most indicated diets, and finds ready patient acceptance. Its generous nutrient content is detailed in the table below.

THE WANDER COMPANY, 360 N. MICHIGAN AVE., CHICAGO 1, ILL.

Ovaltine

Three servings of Ovaltine, each made of ½ oz. of Ovaltine and 8 oz. of whole milk, provide:*

PROTEIN	32 Gm.	VITAMIN A	3000 I.U.
FAT	32 Gm.	VITAMIN B_1	1.16 mg.
CARBOHYDRATE	65 Gm.	RIBOFLAVIN	2.0 mg.
CALCIUM	1.12 Gm.	NIACIN	6.8 mg.
PHOSPHORUS	0.94 Gm	VITAMIN C	30.0 mg.
IRON	12 mg.	VITAMIN D	417 I.U.
COPPER	0.5 mg.	CALORIES	676

*Based on average reported values for milk.

Two kinds, Plain and Chocolate Flavored. Serving for serving, they are virtually identical in nutritional content.

TEACHING BY COLOR TELEVISION

Featured First Time at Two-Day Medical Seminar in Detroit, November 15-16

Teaching by television will reach a new milestone next month at the first postgraduate medical seminar ever presented entirely by means of color television.

Under the auspices of the Wayne University College of Medicine, a two-day program of medical and surgical procedures will be "colorcast" on November 15 and 16 to the Masonic Temple in Detroit from Grace Hospital, it was announced today by Dean Gordon H. Scott, of Wayne University.

The program will be put on in co-operation with the Academy of General Practice of Wayne County, the Wayne County Medical Society, and Grace Hospital, and will be sponsored and directed by Smith, Kline & French Laboratories, Philadelphia pharmaceutical firm.

Twelve special color television receivers will bring the program to physicians assembled from Michigan, Ohio, and Canada.

Although the seminar will be the sixteenth medical meeting at which color television has played a part, it will mark the first time that the entire program has been presented over color television.

In pioneering the medical application of color television, Smith, Kline & French has presented the medium at eleven medical meetings throughout the country, colorcasting a total of 125 surgical operations and 130 medical clinics. Presentations also are scheduled at the District of Columbia Medical Society meeting, October 2-4; the American College of Surgeons, in Boston, October 23-27; and the International College of Surgeons, Cleveland, November 1-2.

"Previous demonstrations of color television at medical meetings have only partially exploited the advantages of this electronic miracle by using it to supplement the main program," Dr. Scott said. "At our Detroit seminar color television will be used as the basic ingredient of a postgraduate seminar. The program is being prepared by and for general practitioners, not as a stunt but to help them learn more basic medicine faster. Instead of traveling from one clinic to another, doctors will be able to have a still better view of the demonstration while seated in the elegant ballroom of the Masonic Temple. This use of color television is not merely a matter of convenience; it expedites medical teaching; it means more medicine for more physicians in less time. We hope to teach as much medicine in two days as is ordinarily taught in a week-long postgraduate session."

Two-Way Exchange of Information

A new feature has been developed for this meeting. Smith, Kline & French have made arrangements to permit a two-way exchange of information. During a presentation, members of the audience will be able to ask questions of the physician or surgeon who is demonstrating a particular procedure. "In this manner," Dr. Scott said, "the audience will be brought right into the operating room or clinic, while actually remaining several miles away."

The program has been drawn up by a committee under the chairmanship of Dr. Charles G. Johnston, professor of surgery at Wayne University.

"We have emphasized clinical and surgical subjects of greatest interest to the general practitioner —that is, problems he meets in everyday practice," Dr. Johnston said. "Several of our presentations will center first around a demonstration and examination of patients with different types of a pathological lesion, followed by an operation on one of the types amenable to surgery. We hope thus to cover the range of problems most frequently encountered in the treatment of specific conditions."

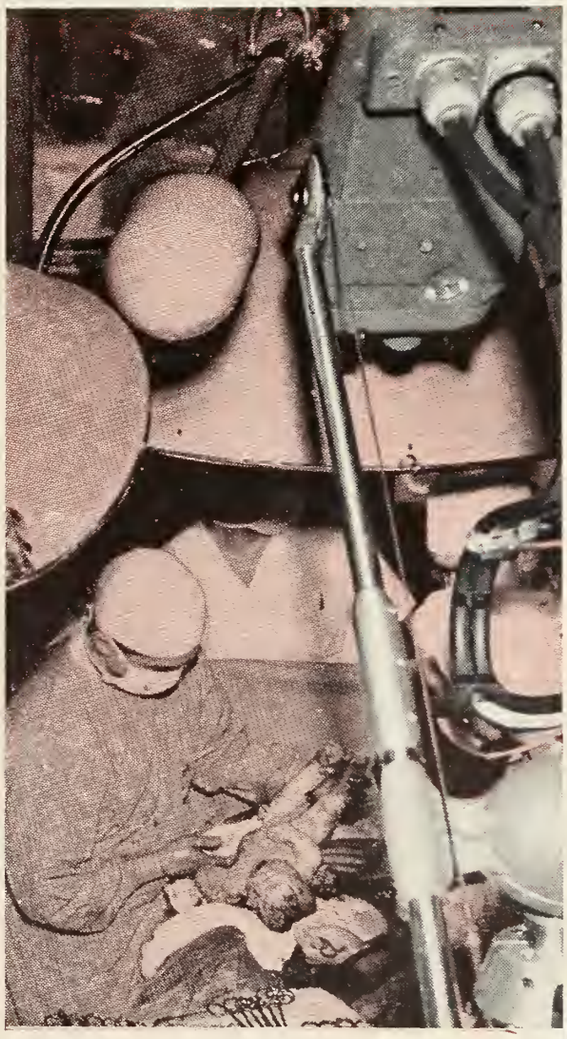
Dust as we are, the immortal spirit grows
Like harmony in music; there is a dark
Inscrutable workmanship that reconciles
Discordant elements, makes them cling together
In one society. How strange that all
The terrors, pains, and early miseries,
Regrets, vexations, lassitudes interfused
Within my mind should e'er have borne a part,
And that a needful part, in making up
The calm existence that is mine when I
Am worthy of myself.

—WORDSWORTH

announcing

The first Postgraduate Teaching Seminar ever to be presented by

color television



Wayne University College of Medicine
in cooperation with the
Detroit Academy of General Practice,
the Wayne County Medical Society,
and Grace Hospital will present. . .

a two-day Color Television program on
clinical problems commonly encountered
by the general practitioner.

Medical and surgical procedures will be
transmitted from Grace Hospital to the
ballroom of Detroit's Masonic Temple
on Nov. 15th & 16th.

An accredited meeting of the
Michigan State Medical Society

Sponsored and directed by

Smith, Kline & French Laboratories

as a service to the medical profession

Fourth Michigan Postgraduate Clinical Institute

March 14, 15, 16, 1951

B. R. Corbus, M.D.

Speakers and subjects at the 1951 Michigan Postgraduate Clinical Institute scheduled for the Book-Cadillac Hotel, Detroit, Wednesday, Thursday, Friday, March 14-15-16, 1951, are of such renown and of such practical interest, respectively, that the Arrangements Committee, headed by B. R. Corbus, M.D., Grand Rapids, anticipates a record-breaking crowd of Michigan, Ohio, Indiana, Wisconsin, and Ontario physicians and surgeons to register at the Institute.

Here's an early "peek" at the well-rounded three-day continuation course which busy practitioners of medicine will enjoy next March in Detroit:

Noyes L. Avery, Jr., M.D., Grand Rapids, "Pancreatitis Clinical Manifestations and Treatment."

Allan C. Barnes, M.D., Columbus, Ohio, "Dietary Therapy in Pregnancy and Its Complications."

Clifford D. Benson, M.D., Detroit, "Surgical Lesions in the Upper Abdomen in the Newborn and Infant."

David A. Boyd, Jr., M.D., Rochester, Minnesota (subject to be announced).

Osborne A. Brines, M.D., Detroit, participant of Clinical X-Ray Conference.

Willis E. Brown, M.D., Little Rock, Arkansas (subject to be announced).

Henry W. Cave, M.D., New York City, "Medical and Surgical Approach to Infectious Diseases of the Colon."

Jerome W. Conn, M.D., Ann Arbor, Moderator of ACTH and Cortisone Panel.

Arthur C. Curtis, M.D., Ann Arbor, "Contact Dermatitis."

Robert H. Denham, M.D., Grand Rapids, "The Neglected Field of Minor Surgery."

Ivan F. Duff, M.D., Ann Arbor, "Administration of Anticoagulant Drugs."

Stanley Gibson, M.D., Chicago (subject to be announced).

Angus G. Goetz, M.D., Detroit (subject to be announced).

John E. Gordon, M.D., Boston, Mass. (subject to be announced).

Evarts A. Graham, M.D., St. Louis, will be the R. S. Sykes Lecturer and also will present another talk (subject to be announced).

W. Paul Holbrook, M.D., Tucson, Arizona, participant on ACTH and Cortisone Panel.

George Kamperman, M.D., Detroit, "Prevention of Prematurity."

Harold J. Kullman, M.D., Dearborn (subject to be announced).

G. Thomas McKean, M.D., Detroit, "Plural Fluid."

Francis D. Moore, M.D., Boston, Mass., "The Metabolic Response to Surgery" and participant on ACTH and Cortisone Panel.

Gordon B. Myers, M.D., Detroit, participant on Clinical X-Ray Conference.

Reed M. Nesbit, M.D., Ann Arbor, "Congenital Valve Obstructions in the Urinary Tract of Infants."

Lawrence Reynolds, M.D., Detroit, participant on Clinical X-Ray Conference.

J. Milton Robb, M.D., Detroit, "Cysts and Fistulae of the Face, Mouth and Neck."

Albert D. Ruedemann, M.D., Detroit (subject to be announced).

John M. Sheldon, M.D., Ann Arbor, "Antihistaminics."

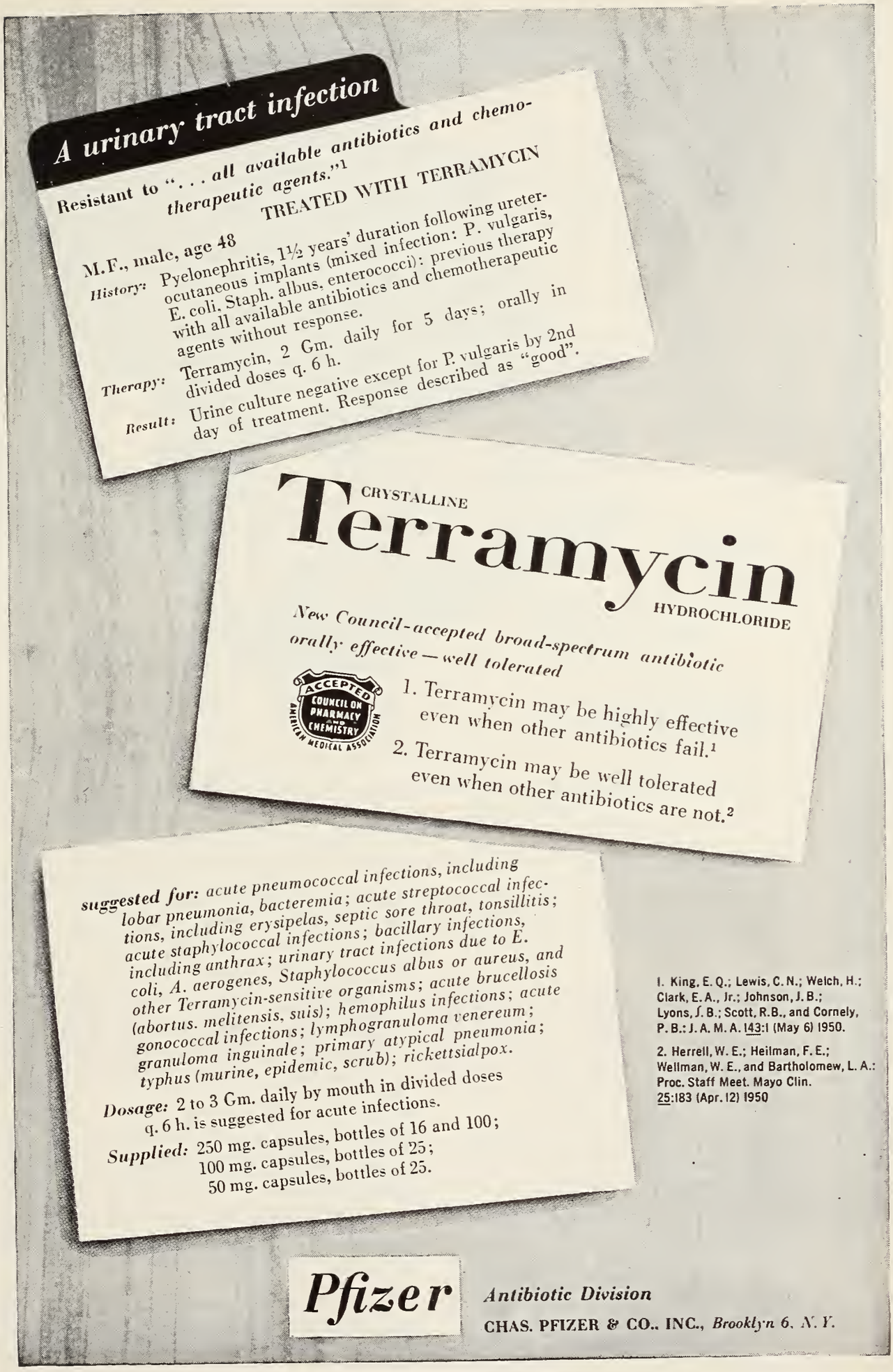
Frederick C. Swartz, M.D., Lansing (subject to be announced).

Willard O. Thompson, M.D., Chicago, "Androgens and Estrogens in General Practice."

Harry A. Towsley, M.D., Ann Arbor, "The Diagnosis and Management of Group at Infancy."

Warren K. Wilner, M.D., Ann Arbor, "Anesthesia in Chest Surgery."

The Hoover Report reveals that the Army, Navy and Air Forces asked for a $30 billion appropriation after being told that $15 billion was all that the nation could afford. . . . In its budget the Army asked for 829,000 tropical uniforms at a cost of $125 apiece. . . . This was more uniforms than we had soldiers. . . . The Army requested 910 houses for military personnel in Alaska at $58,000 apiece, and 828 houses in Guam at a cost of $48,000 apiece. . . . On June 30, 1948, government hospitals had room for 255,000 patients, but only 155,000 patients were on hand, and medical personnel were available to treat only 120,000. . . . At the same time, the Veterans Administration was demanding 38,000 more beds and an additional grant of 280 million dollars for new hospitals.—*AAPS News Letter,* April, 1950.


A urinary tract infection
Resistant to "... all available antibiotics and chemotherapeutic agents."1
TREATED WITH TERRAMYCIN
M.F., male, age 48
History: Pyelonephritis, 1½ years' duration following ureterocutaneous implants (mixed infection: P. vulgaris, E. coli, Staph. albus, enterococci): previous therapy with all available antibiotics and chemotherapeutic agents without response.
Therapy: Terramycin, 2 Gm. daily for 5 days; orally in divided doses q. 6 h.
Result: Urine culture negative except for P. vulgaris by 2nd day of treatment. Response described as "good".
CRYSTALLINE
Terramycin
HYDROCHLORIDE
New Council-accepted broad-spectrum antibiotic
orally effective—well tolerated
ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION
1. Terramycin may be highly effective even when other antibiotics fail.1
2. Terramycin may be well tolerated even when other antibiotics are not.2
suggested for: acute pneumococcal infections, including lobar pneumonia, bacteremia; acute streptococcal infections, including erysipelas, septic sore throat, tonsillitis; acute staphylococcal infections; bacillary infections, including anthrax; urinary tract infections due to E. coli, A. aerogenes, Staphylococcus albus or aureus, and other Terramycin-sensitive organisms; acute brucellosis (abortus. melitensis, suis); hemophilus infections; acute gonococcal infections; lymphogranuloma venereum; granuloma inguinale; primary atypical pneumonia; typhus (murine, epidemic, scrub); rickettsialpox.
Dosage: 2 to 3 Gm. daily by mouth in divided doses q. 6 h. is suggested for acute infections.
Supplied: 250 mg. capsules, bottles of 16 and 100;
100 mg. capsules, bottles of 25;
50 mg. capsules, bottles of 25.
1. King, E. Q.; Lewis, C. N.; Welch, H.; Clark, E. A., Jr.; Johnson, J. B.; Lyons, J. B.; Scott, R. B., and Cornely, P. B.: J. A. M. A. 143:1 (May 6) 1950.
2. Herrell, W. E.; Heilman, F. E.; Wellman, W. E., and Bartholomew, L. A.: Proc. Staff Meet. Mayo Clin. 25:183 (Apr. 12) 1950
Pfizer
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CHAS. PFIZER & CO., INC., Brooklyn 6, N. Y.

You and Your Business

FIFTY YEAR CLUB

The ranks of the Michigan State Medical Society's "Fifty Year Club" were swelled to a total of 139 on September 20 when MSMS President W. E. Barstow, M.D., gave membership pins to nine veteran doctors of medicine who became eligible in 1950.

The new members of the organization, composed of those who have practiced medicine for fifty or more years, were inducted on the occasion of the annual Officers Night at the eighty-fifth Annual Session and Postgraduate Conference held in Detroit, September 17-22.

The new "Fifty Year Club" members are: Bruce Anderson, M.D., Pontiac; James Henry, M.D., Grand Rapids; H. H. Learmont, M.D., Croswell; Charles Norton, M.D., Detroit; George R. Pray, M.D., Jackson; Edward Ramsey, M.D., Detroit; E. O. Sage, M.D., Detroit; William Stapleton, M.D., Detroit and Lewis L. Stewart, M.D., Jackson.

BLUE CROSS PROTECTS FAMILIES OF SERVICEMEN

Because of the Korean situation, Michigan Blue Cross-Blue Shield has reinstated its wartime military leave service program. The aim of this program is to provide hospital-medical protection for the dependents of subscribers, including members of the Michigan State Medical Society who enter the services and who are covered by Blue Cross.

It also assures those who go that their return to Blue Cross upon leaving military services will be a simple matter, requiring only notification to Blue Cross within 90 days after discharge.

Major provision of the program permits families of doctors going into the armed forces to continue to enjoy the comprehensive benefits and lower rates of the Blue Cross group program.

Under this provision, the doctor of medicine entering the services should notify Blue Cross upon induction so that whatever changes are necessary can be made in his billing, and then arrange to continue payments, for the dependents only.

There are two other alternatives for the Michigan State Medical Society member entering the armed forces, under the Blue Cross military leave service program.

He can continue his contract intact, to be sure of hospital-medical protection for himself while on furlough or leave. In this case, no notification, at the time of induction or after discharge, would be necessary.

Or, if he chooses, he can have his contract cancelled altogether while in service, with the same requirement of notification within 90 days after discharge for reinstatement to the group coverage, if still eligible.

Of course, if a subscriber with dependents cancels his contract entirely for the duration of his service, besides leaving his family unprotected, there would be the nine-month waiting period after reinstatement to be eligible for maternity benefits.

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of August 16, 1950

- Monthly financial report, including breakdown of the Public Education Account and of the Public Education Reserve Account, were presented, studied in detail and approved.
  Bills payable for the current month were presented, approved, and authorized for payment.
- Survey of Michigan State Veterans Facility at Grand Rapids. An invitation from the Michigan Civil Service Commission, requesting the Michigan State Medical Society to inspect this state facility and suggesting a method of procedure for this examination, was received and referred to a special MSMS Committee appointed for this purpose.
- County Mediation Committees. Discussing alleged impractices, the Executive Committee ruled "that any complainant be apprised of the fact that there is and has been available in every county medical society a Mediation Committee to which the complainant may make reference in writing."
- The Executive Committee of The Council approved the recommendation of Saul Rosenzweig, M.D., Detroit, Chairman of the Wayne

(Continued on Page 1142)

Accepted at face value

PRIODAX cholecystograms can be accepted at face value. A diseased gallbladder visualizes faintly or not at all. With PRIODAX, a poor shadow means lack of ability to concentrate the contrast medium. Because PRIODAX is well tolerated, the likelihood of loss through the gastrointestinal tract by vomiting or diarrhea is minimal. Thus interpretation is made simpler and more certain.

PRIODAX®

(brand of iodoalphionic acid)

PRIODAX, Schering's brand of iodoalphionic acid, is available in tablets of 0.5 Gm. Envelopes of six tablets in boxes of 1, 5, 25 and 100 envelopes; and Hospital Dispensing Package containing 4 rolls of 250 tablets each.

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PRIODAX

SCHERING

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

(Continued from Page 1140)

County Rheumatic Fever Center, that a scientific program on rheumatic fever be arranged in Detroit, to be held at a regular meeting of the Wayne County Medical Society, to which a nationally known speaker is to be invited.

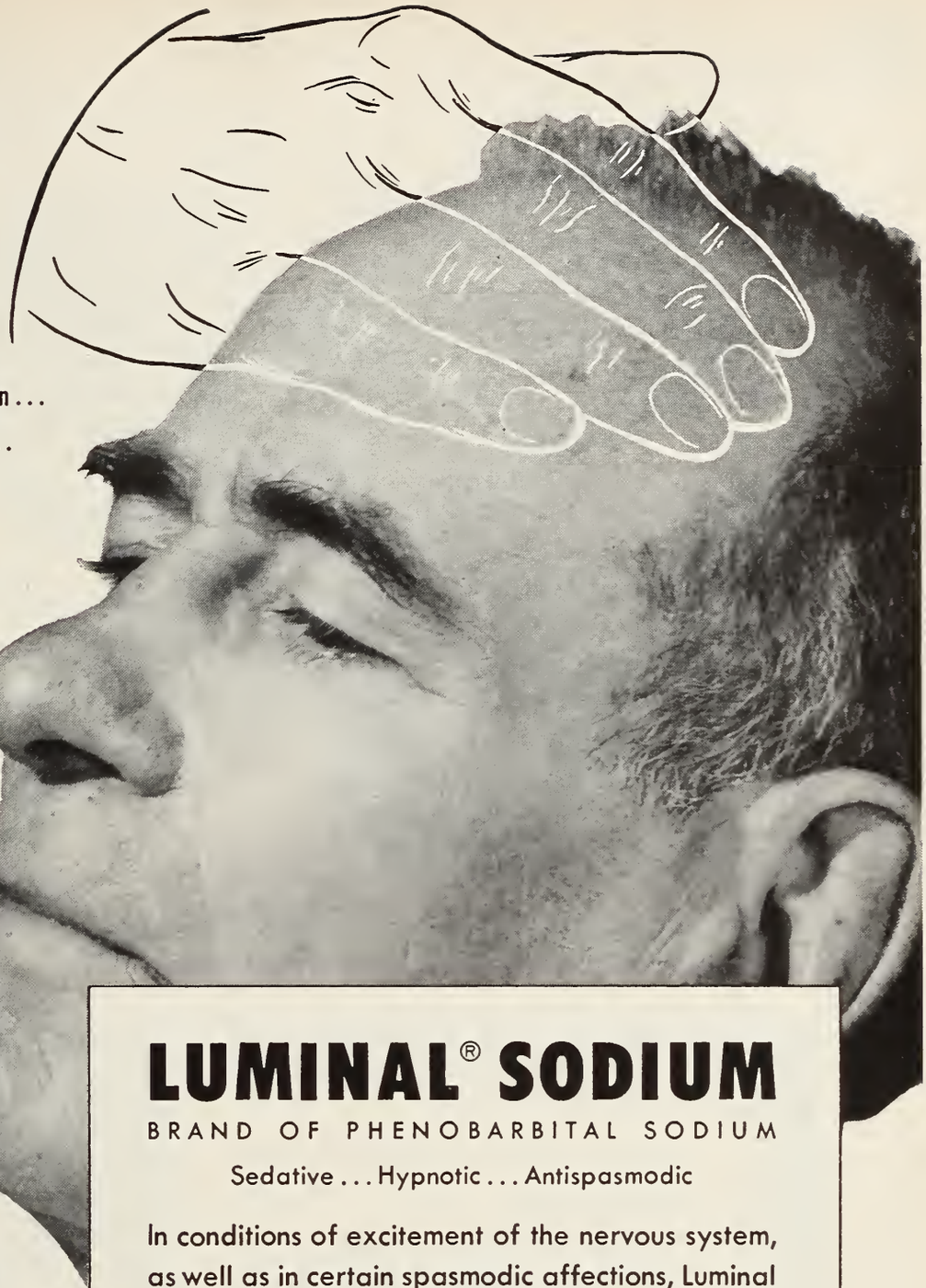
- The Cancer Control Committee was informed that The Council of the Michigan State Medical Society definitely disapproves the compulsory reporting of cancer, for cause.
- Liaison Committee between MSMS and Michigan Hospital Association. J. E. Livesay, M.D., Flint, and Ralph Wadley, Md., Lansing were added to the Liaison Committee composed of J. Duane Miller, M.D., Grand Rapids, Chairman, E. G. Merritt, M.D., Detroit and J. A. Witter, M.D., Detroit.
- J. S. DeTar, M.D., Milan was appointed MSMS representative to the Conference on M.D. Participation in Health Councils, Detroit, October 1, 1950, sponsored by the AMA Council on Medical Service and the Michigan State Medical Society.
- Councilor W. S. Jones, M.D., Menominee, was authorized to attend the Annual Session of the State Medical Society of Wisconsin, in Milwaukee, as MSMS representative.
- J. M. Dorsey, M.D., Detroit, was appointed as MSMS representative on the Citizens Education Committee, a state-wide organization interested in the mental health problem.
- Procurement and Assignment for Michigan. The Executive Committee of The Council authorized The Council Chairman to furnish the American Medical Association with the names of three doctors of medicine from widely separated areas of Michigan, to be listed as the Chairman, the First Vice Chairman, and the Second Vice Chairman of Procurement and Assignment for Michigan, and that it be recommended to the AMA that the two Vice Chairmen have duplicates of the file in case of atomic or other major emergency in this State.
- Frank Van Schoick, M.D., Jackson, was selected as the MSMS representative to the Michigan Youth Commission, from which recommendations from this state will be forwarded for consideration at the Mid-century White House Conference on Children and Youth, Washington, D. C.
- Dr. Lawrence L. Quill, E. Lansing, Professor of Chemistry at Michigan State College, Dr. J. J. Grebe, Midland, Physicist at Dow Chemical Company, and A. O. Brines, M.D., Detroit, were added as members of the MSMS Committee on Atomic and Allied Procedures.
- W. B. Cooksey, M.D., Detroit, Delegate from Michigan to the American Heart Association and Immediate Past President of the Michigan Heart Association, spoke of the work of the MHA and of its co-operative activity with the Michigan Rheumatic Fever Control Program. Thanks were extended to the MHA and its officers and directors.
- Public Relations Council's report included progress on (a) the Good Citizenship Campaign; (b) Radio and television assignments during the MSMS Annual Session, 1950; (c) Spread to other states of MSMS movies "To Your Health" and "Lucky Junior"; (d) The placing of advertisements in various media; (e) The National Advertising Campaign of the AMA; and (f) The sale of MSMS publications to other state medical societies and organizations.
- The following Committee reports were given consideration: (a) On Study of Medical Practice Act, meeting of July 27; (b) Health Survey Advisory Committee, meeting of July 27; (c) Committee on 1951 Michigan Industrial Health Day, meeting of August 15; (d) Permanent Conference Committee, June 28. In addition, the minutes of the Governor's Civil Defense Council, meetings of July 31 and August 11, were presented and discussed and various suggestions for co-operation in the medical phases were offered.

AMERICAN COLLEGE OF PHYSICIANS—MIDWEST REGIONAL MEETING

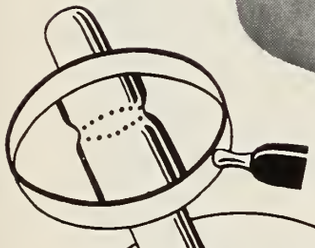
The Midwest Regional Meeting of the American College of Physicians will be held at the Memorial Union Theater on the campus of the University of Wisconsin in Madison, Wisconsin, Saturday, November 18, 1950. Registration will begin at 8:00 A.M. and the scientific meetings will be followed by a social hour and dinner to be held at the Loraine Hotel in Madison, beginning at 5:30 P.M. The day will be filled by the presentation of scientific papers. In addition, a scientific exhibit will be provided in the foyer of the Memorial Union Theater. Details of the program and an outline of the exhibits follow.

(Continued on Page 1144)

the quieting hand



—in preoperative apprehension...
postoperative restlessness...
insomnia...
epilepsy...
dysmenorrhea...
vomiting of pregnancy...
eclampsia...
hypertension...
pyloric spasm...
neuroses...



NEW, EASILY OPENED SERRATED AMPUL

—Luminal Sodium Powder is available in a new, constricted-neck ampul—serrated for easy opening. Only moderate pressure is required to make the file cut.

LUMINAL® SODIUM

BRAND OF PHENOBARBITAL SODIUM

Sedative . . . Hypnotic . . . Antispasmodic

In conditions of excitement of the nervous system, as well as in certain spasmodic affections, Luminal Sodium acts as a soothing, quieting agent to tranquilize hyperexcitability or to curb convulsive paroxysms. Small doses have a pronounced sedative and antispasmodic action. Large doses are markedly hypnotic.

For oral use . . . tablets of 16 mg. (¼ grain), 32 mg. (½ grain) and 0.1 Gm. (1½ grains).

For parenteral use . . . solution in propylene glycol 0.32 Gm. (5 grains) in 2 cc. ampuls;

powder 0.13 and 0.32 Gm. (2 and 5 grains) in ampuls.

Winthrop-Stearns INC.
NEW YORK, N. Y. WINDSOR, ONT.

Luminal, trademark reg. U. S. & Canada

AMERICAN COLLEGE OF PHYSICIANS MIDWEST REGIONAL MEETING

(Continued from Page 1142)

Three transportation companies, the Northwest Airlines, the Chicago, Milwaukee, St. Paul, and Pacific Railroad, and the Northwestern Railroad, are co-operating to provide transportation to and from the meeting. Special pullman cars on both of the railroads will be operated from Chicago to Madison immediately preceding the meeting and returning to Chicago following the dinner in the evening. Either railroad is prepared to make reservations by mail through their Madison offices. In addition, rooms will be available at all of the larger hotels in Madison. Your connection with this meeting should be mentioned in making your hotel reservation.

Entertainment has been planned for the ladies, including a tea on Saturday afternoon at which Mrs. Oscar Rennebohm, wife of the Governor of Wisconsin, will be hostess. Tea will be served in the Governor's Mansion on the shores of Lake Mendota.

It must be emphasized that this meeting is open to all physicians whether or not they are members of the American College of Physicians. All physicians and their wives are cordially invited to be present and to participate.

Reservations for luncheon and dinner should be made immediately through Dr. H. M. Coon, 1300 University Avenue, Madison 6, Wisconsin.

REFILLING PRESCRIPTIONS

Practicing pharmacists have labored under a handicap of no formal regulation on the extent to which refilling of prescriptions is regulated by the Federal Food, Drug and Cosmetic Act. The interpretations of the Commissioner and his staff have at times been at variance with the interpretations of the sections of the Act concerning prescription refilling by the officers and Council of the American Pharmaceutical Association.

Efforts have been made by the Association to resolve the difference in their belief which is that the Food and Drug Administration has been vague and arbitrary in its interpretations of what the Association believes Congress really intended.

In an effort to resolve these differences a legal study has been made and a long report requesting the Honorable Oscar R. Ewing, Administrator of the Federal Security Agency, to issue an order specifically outlining the problem.

The ruling asked for is that no prescription can be refilled if marked by the issuing physician, dentist or veterinarian, as not to be refilled; or if it contains a drug which falls under the prohibition section of the Food, Drug and Cosmetic Act, with certain restrictions.

Second, any other prescription can be lawfully refilled if the issuing physician, dentist or veterinarian is authorized by law to administer such a drug, and if such a prescription when refilled bears a label giving the name and place of business of the dispenser, the serial number and date of the prescription, and the name of the physician, dentist or veterinarian.

MICHIGAN'S FORGOTTEN

Michigan has 33,000 "forgotten" citizens. Citizens without a leader and without rational ability to call attention to their neglect. These people are the 29,000 mentally ill in Michigan's hospitals and the near 4,000 who should be treated but for whom there is no room.

These "forgotten" persons graphically came to light when the state legislature unanimously approved the placing of a $65,000,000 bond issue proposal on the November 7 ballot to make available new mental and tuberculosis hospitals.

Calling our mentally ill "forgotten" is not fair to the conscientious and overworked mental health personnel who have vainly tried to adequately care for the growing horde. "Forgotten" does describe the attitude Michigan's citizens have taken toward the problem for the past 20 years.

But the state's voters now have the chance to make amends. They must first approve the bond proposal before corrections can be made. The task now is to make those voters "remember" their obligation to fellow citizens unable to care for themselves and the dire condition they are now in.

Facts, not scare techniques, will bring home the truth of Michigan's mental health situation.

First, there are now 29,000 mentally ill patients in our state hospitals. These patients are jammed into facilities officially called 22 per cent overcrowded. However, the truth is, our hospitals have been 10 per cent overcrowded for many years. That 22 per cent official overcrowding therefore, is requiring 132 patients to live in the space intended for 100.

Second, according to statistics in relation to other states, Michigan has now almost 4,000 untreated mentally ill or disturbed persons.

As of August 1, 1950, this included the following persons actually committed by our courts but still untreated because of a complete lack of space: 324 mentally ill, 56 criminally insane, 633 mentally deficient, and 175 epileptics. That is a total of 1,188 that should now legally be in mental hospitals.

A total of 633 unfortunate children who have been committed to hospitals for the feebleminded but who must remain untreated because of no available facilities also exists.

But the story of the "forgotten" does not end there. Mental health experts predict that 600 new cases requiring hospital treatment can be expected in Michigan every year for some time in the future.

That's the story. The final point is this. Michigan, nearly at the top of the nation in population and state income, ranks but twenty-first among the states in providing adequate care for its mentally ill.

The means for immediate correction of the shameful situation will soon be in the hands of each voter of Michigan when he or she picks up his ballot on November 7. The $65,000,000 bond proposal will be No. 2 on the list of proposed amendments.

Here's what passage of that bond proposal will do. It will allow the state legislature to begin immediate

(Continued on Page 1154)

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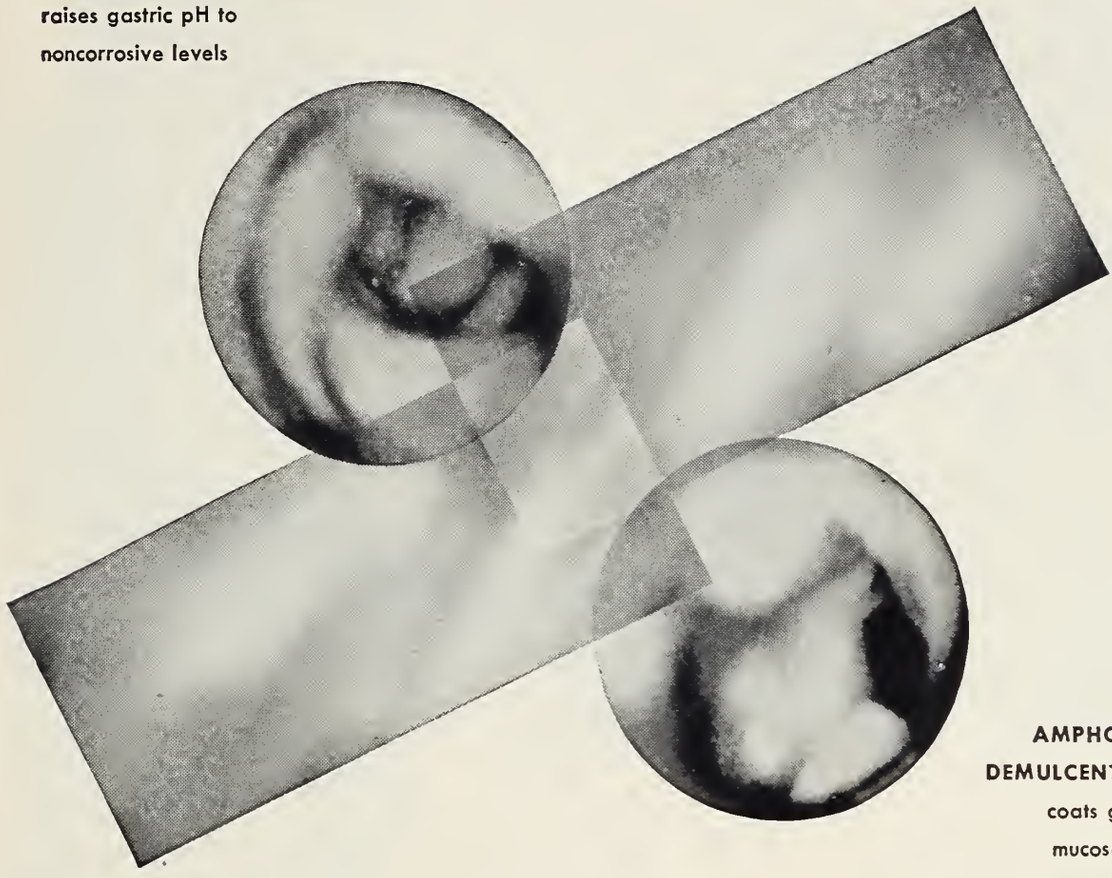

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SIXTEEN MILLION IN BLUE SHIELD

Blue Shield Commission officials at the recent San Francisco meeting seem pleased with the report shown them by Frank E. Smith, Director, which reveals that Blue Shield enrollment has topped the 16 million mark and is increasing by 28,000 every working day. Grouped around Smith are (l. to r.) O. B. Owens, New Orleans, La., Secretary; Jay C. Ketchum, Detroit, Treasurer; R. L. Novy, M.D., Detroit, Vice-President, and L. Howard Schriver, M.D., Cincinnati, President.

MICHIGAN MEDICAL SCHOOL CENTENNIAL

The University of Michigan Medical School, one of the oldest of its kind in North America and noted for its great contributions to medical progress, was duly honored by the Michigan State Medical Society on the occasion of its one hundredth anniversary. An attractive Scroll of Appreciation was presented to its president and dean by the organized medical profession of Michigan.

The commemorative parchment was presented to President Alexander G. Ruthven and Medical Dean A. C. Furstenberg, M.D., by W. E. Barstow, M.D., St. Louis, Michigan State Medical Society President. The presentation was an impressive part of the annual Officers Night ceremonies held Wednesday, September 20, in the Grand Ballroom of the Hotel Book-Cadillac, Detroit, coincident with the eighty-fifth annual session.

The centennial of the famous medical center at Ann Arbor had previously been recognized by the dedication of the May issue of THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY to this event.

The inscription on the award made to the University of Michigan Medical School reads as follows:

> "Presented by the Michigan State Medical Society to the University of Michigan Medical School on the occasion of its one hundredth Anniversary in deep appreciation and grateful recognition of long and distinguished service to humanity."

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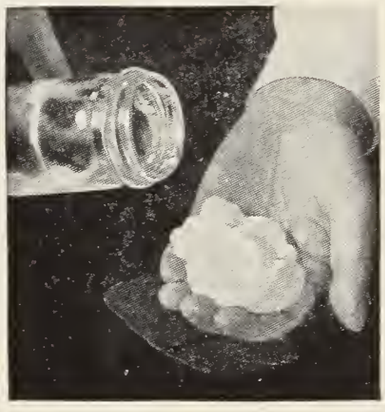

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DOCTOR COOKSEY ELECTED PRESIDENT, UNITED HEALTH AND WELFARE FUND

W. B. Cooksey, M.D.

Warren B. Cooksey, M.D., of Detroit, one of the founders of the Michigan Heart Association and its first president, was elected president of the United Health and Welfare Fund of Michigan at the organization's annual meeting September 13. Dr. Cooksey is the third president of the state fund-raising organization.

Five doctors of medicine serve with Dr. Cooksey on the Fund board. They are L. Fernald Foster, M.D., of Bay City, D. F. Scott, M.D., of Sault Ste. Marie, Gereon Frederickson, M.D., of Iron Mountain, S. Rudolph Light, M.D., of Kalamazoo and Otto K. Engelke, M.D. of Ann Arbor.

The United Fund was organized to raise money for health and welfare services economically and efficiently and to reduce the number of separate campaigns. Its statewide goal for thirty-nine member agencies is $1,818,083. Most of this will be raised in fall campaigns in conjunction with Community Chest appeals, but there will be a few counties which will campaign in February.

In accepting the presidency, Dr. Cooksey pointed out that 72 per cent of the money raised for the United Fund is for health agencies.

In addition to his new position, Dr. Cooksey was elected, in San Francisco last June, a director of the American Heart Association.

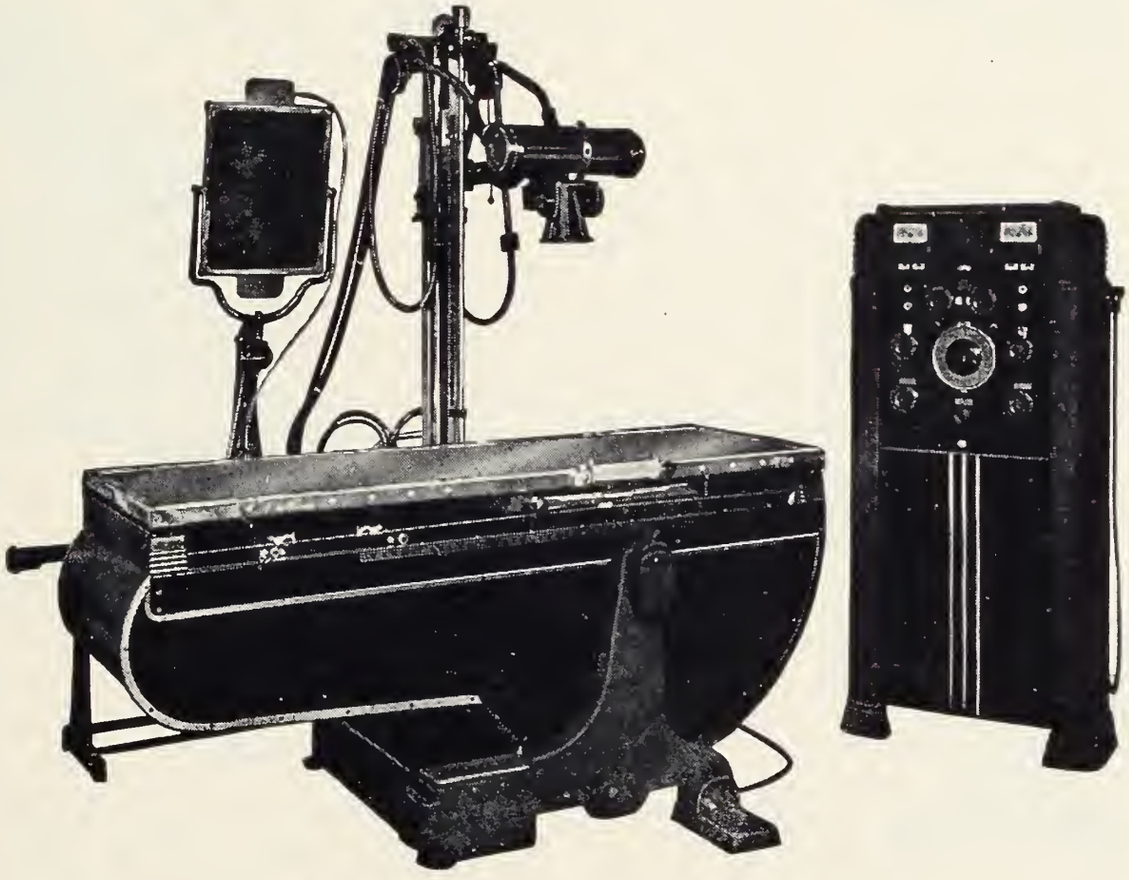
M.D. REGISTRATION FOR ELECTIONS REACHES 97 PER CENT

The registration of doctors of medicine, their wives and their medical assistants, to participate in the 1950 elections, has reached a new all-time high. A report covering thirty-nine county medical societies shows that our Michigan medical practitioners have gained a 97.15 per cent total registration. Figures obtained at the same time show that doctors' wives are 97.13 per cent registered, while the medical assistants have a total of 90.5 per cent participation.

The latest report of the results of project "Registration" of the MSMS "Good Citizenship Campaign" are as follows:

	97.15%	97.13%	90.5%
County	*Doctors*	*Wives*	*Medical Assistants*
Allegan	100%	100%	100%
Alpena	100%	98%	90%
Bay	100%	100%	99%
Barry	98%	98%	75%
Branch	100%	100%	98%
Calhoun	93%	96%	90%
Cass	100%	100%	100%
Chippewa-Mackinaw	100%	100%	100%
Delta-Schoolcraft	95%	95%	95%
Dickinson-Iron	100%	100%	100%
Genesee	87%	87%	——
Grand Traverse-Leelanau-Benzie	100%	100%	100%
Gratiot-Isabella-Clare	100%	100%	100%
Hillsdale	100%	100%	90%
Houghton-Baraga-Keweenaw	100%	100%	100%
Huron	100%	100%	100%
Ionia-Montcalm	94%	92%	90%
Jackson	87%	82%	——
Kalamazoo	98%	98%	95%
Lapeer	100%	100%	——
Luce	100%	100%	100%
Manistee	100%	100%	100%
Mason	100%	100%	100%
Mecosta-Osceola-Lake	100%	100%	100%
Menominee	100%	100%	66%
Muskegon	98%	98%	85%
Newaygo	100%	100%	100%
North Central	80%	75%	70%
Northern Michigan	100%	98%	90%
Oceana	100%	100%	90%
Ottawa	100%	100%	100%
Saginaw	95%	95%	95%
Sanilac	100%	100%	——
St. Clair	96%	95%	82%
St. Joseph	100%	100%	92%
Van Buren	99%	99%	90%
Washtenaw	76%		——
Wayne	99%	91%	86%
Wexford-Missaukee	94%	94%	100%

This ultra modern 200 MA two tube full wave diagnostic unit used so successfully by the Army now with rotating anode tube and therefore particularly well adapted to hospital and clinical requirements is now available for civilian institutions and physicians at our usual reasonable price. Also furnished for use in connection with our floor-ceiling rail Tube-stand and our photo fluoro-graphic 70 M.M. chest unit.



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Military Medicine

ARMY AUTHORITIES APPOINTMENT OF WOMEN DOCTORS AS RESERVE CORPS OFFICERS

Appointment and concurrent assignment to active duty as Reserve Officers of women physicians, dentists, and allied specialists, has been authorized, according to announcement by the Department of the Army.

This marks the first time authorization has been given for women to be commissioned in the Medical, Dental, Veterinary, and Medical Service Corps Reserves. They will be brought on duty under regulations currently providing for the commissioning of male officers in these Corps. Some women did serve in the Army as physicians and technicians during World War II, but their commissions have expired.

As Reserve officers on active duty, these women will be given opportunities for clinical practice and advancement which are now available to male officers in comparable grades, Major General R. W. Bliss, Surgeon General of the Army, pointed out. Appointments will be in grades from first lieutenant to colonel, depending upon age, experience, and professional qualifications. The pay, allowances, dependency and retirement benefits which accrue to male officers will apply to the women medical reservists. Women physicians and dentists will also draw the $100 a month professional pay allowed above the base pay of their commissioned rank. They will be eligible for service in every type of military medical facility, with the exception of forward medical installations in combat zones.

General Bliss said his office had received numerous letters during the past year from women physicians desiring military service.

ARMY REDUCES RECALLS OF WW II PHYSICIANS, DENTISTS

Army area commanders have received new instructions relative to the recall of reserve medical, dental and veterinary officers which should reduce the number with World War II service to be called from 50 to 75 per cent, the Department of the Army announced today.

The new move, taken in view of legislation providing for selective induction of physicians, dentists and members of other allied professions, will have the effect of limiting the recall of officers with World War II service to a maximum of 364 physicians, 126 dentists and twenty-nine veterinarians. The actual number recalled will be considerably less than this figure, it was estimated.

The new special quotas restricting World War II recalls will have no effect on total Army Medical Service recall requirements, according to Major General R. W. Bliss, Army Surgeon General. The new policy will, however, have the effect of strengthening the preferred status of professional officers with World War II service, thereby reflecting the active duty priorities contained in the new legislation.

Since it is estimated that 90 to 120 days will be required after the passage of the legislation before physicians, dentists and others actually enter military service, the policy is an interim measure, designed both to protect those with the most military service and assure an adequate number of professional officers for the Army before the new legislation becomes effective.

This is the way it is expected to work:

Each Army commander will still have the same over-all quota of Army Medical Service personnel as originally announced. However, his quota will now consist of two parts—the new special quota and the balance of his over-all allocation. In filling the special quota, every effort will be made to fill it insofar as grade, specialty and numbers permit, with volunteers, including former ASTP students with no active service, and reserve officers with no World War II service. If necessary, officers with World War II service may be recalled when others are not available in the required grades and specialties. The balance of the over-all quota must be filled with volunteers and reserve officers without wartime service and will not be filled with World War II officers.

All officers with World War II service not included in recalls for the special quota in each Army area will be temporarily deferred from recall, except those assigned to duty with alerted National Guard or Organized Reserve units. The policy will not apply to officers assigned to these units.

Maximum quotas by Army areas follow:

	Medical Corps	*Dental Corps*	*Veterinary Corps*
First Army	70	31	4
Second Army	68	26	7
Third Army	45	14	4
Fourth Army	46	12	5
Fifth Army	68	31	6
Sixth Army	67	12	3

MEDICAL PERSONNEL POLICY ANNOUNCED BY ARMY

A policy under which professional medical service officers assigned to Reserve or National Guard units called to active duty will be recalled only to the extent they can actually be utilized, the Department of the Army has announced.

Two general types of units will be affected by this policy. The first includes Army divisions, headquarters of medical battalions and groups, medical clearing companies, medical field laboratories, field hospitals, mobile army surgical hospitals, and all nonmedical units with medical personnel included in their organizations.

Units included in the second group are evacuation hospitals, convalescent centers, general and station hospitals, general laboratories, hospital trains, and general dispensaries.

For the first group, the policy will be to call all med-

(Continued on Page 1152)

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MARTIN ALL-PURPOSE CHAIR TABLE

Universally adaptable for minor surgery, treatment & examination, for proctoscopic work, etc. Available in various models with permanent or removable upholstery, with and without seat cut-out drainage groove and drawer. Its exceptional versatility of usefulness is all that its name implies—an **all-purpose** table.

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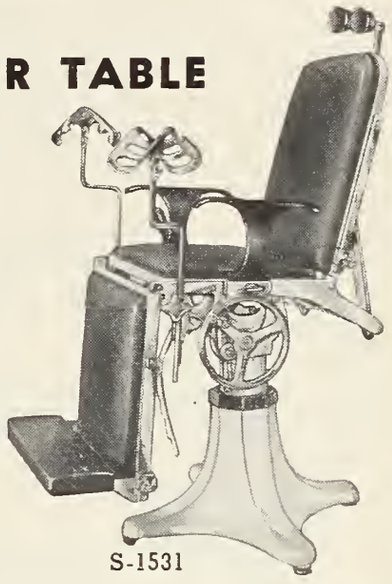

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An ideal table for general examination and treatment. Back section, adjustable from horizontal to chair position, contains built-in paper roll dispenser. Seat section offers removable cut-out with porcelain drainage pan in drawer below. Upholstered drawer cover pulls out to provide knee or leg rest. Entire top covered in acid-resisting plastic upholstery. All steel welded construction with rounded corners. Equipped with spacious cabinet storage, drawers, electrical outlet, stirrups and pull-out footstep as illustrated.

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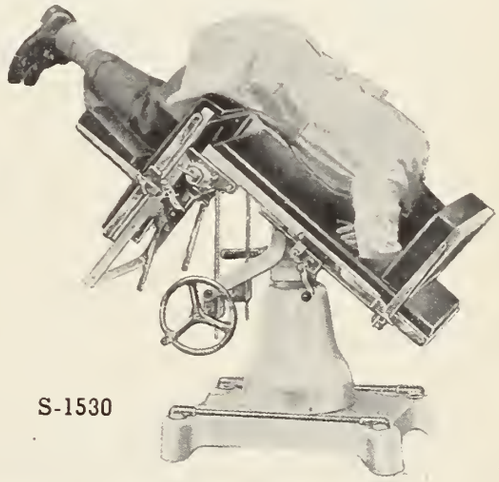

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MEDICAL PERSONNEL POLICY ANNOUNCED BY ARMY

(Continued from Page 1150)

ical service officers, including physicians, dentists and nurses, to duty with their units. However, only the minimum required for actual training will remain with their units during the training period. For example, although an infantry division is authorized 42 physicians, only 17 will be retained by the division during its training period. The balance will be assigned to the hospital serving the division. Provision has been made for rotation to assure that each physician has the greatest possible opportunity to continue a balanced medical practice, both with the unit in the field and at the station hospital. All the division dental officers would be utilized at the camp hospital or dental clinic.

For units falling in the second group, only the professional personnel actually required for training or support will be recalled. The balance of the assigned medical service officers will remain at home until a short time before the unit is actually ready for operation. Thus, in the case of a 1,000-bed general hospital, only three physicians and two nurses will initially be called to duty with the unit. The balance of the physicians and nurses will await a warning order for the unit's deployment. Dental officers will be used in the same manner as those assigned to units falling in the first group.

All Medical Service Corps officers and enlisted personnel assigned to all types of units will be called to active duty with their units.

DRAFT SOME DOCTORS? IT'S AN EXCELLENT IDEA

Oh, doctor dear, I bleed for thee, but I do not bleed very profusely. Just a slight trickle, and don't bother with the tourniquet. It'll stop in a minute.

We notice that the Senate passed a bill to draft some of the 4,000 short-order sawbones who beat the last unpleasantness by remaining in college at Government expense to sop up materia medica.

Meanwhile, grayheaded brain surgeons were swabbing athletes' foot in odd places, and obstetricians were ministering to Pacific rot.

Of this number, 4,000—exactly one man had volunteered for service at last reading—and so we got to squeeze swiftly through Congress to get enough doctors to bind a wound without calling up physicians who have already spent their time in the last rat race.

One man out of 4,000.

I am reminded slightly of the tramp athletes who found a snug harbor at the military academies during World War II, to bleed and die upon the football fields.

There were considerably worse fates in the dear departed conflict than a Government-subsidized technical education, which kept you out of the foxholes and off the destroyers and stuffed your skulls with expensive book larnin'.

It costs a sight to build a doctor, even in peacetime. To beat a draft and knock off a free medical education is quite a feat.

Like the man said, once, there is no such thing as a free lunch. What you take out you put back. The man says put it back, now, and one guy out of 4,000 volunteers, even though the volunteers get an extra $100 a month.

The doctors who got educated in time of actual war have a debt to repay comparable to no other classification I can think of offhand.

The tragedy of war to others was to them a decisive boom—complete safety, the pleasures of the home front and a gratis education that runs into thousands of dollars.

These men literally owe their profession, their immediate livelihood, to other men's blood.

I am generally reticent about waving a flag over other folk's heads, but this is one group I wouldn't weep for if they all got drafted on private's pay.

They had it awful easy when a lot of other guys had it awful tough. They owe us some interest on the loan.—Ruark in *Detroit Free Press*, August 31, 1950.

Unless one considers all tumors of childhood to be malignant until proved otherwise, little headway will be made with the problem of cancer control.

* * *

Radiation therapy should not be utilized in the treatment of parotid neoplasms.

* * *

Small discrete masses in the parotid gland which do not involve the facial nerve should be excised *in toto* for histologic diagnosis.

* * *

Accumulated clinical evidence indicates that the precise differential diagnosis of benign from malignant ulcers of the stomach is quite impossible with the use of methods currently in vogue.

* * *

If the results of treatment of gastric cancer are to reach a measure of worthwhile success, collective effort must be directed toward those lesions which herald their presence early by symptoms which are ulcer-like in character.

* * *

An ulcer in any location in the stomach may be malignant.

* * *

The differentiation of benign from malignant gastric ulcers on the basis of gastric acidity is quite unsound.

* * *

The cytological cervical smear should always be taken *before* the patient has taken a douche and before a bimanual vaginal examination is made. The speculum should be inserted into the vagina with little or, preferably, no lubricating agent on it.

* * *

The study of exfoliative cells should not be regarded as a complete diagnostic procedure but rather as corroborative evidence with established procedures.

* * *

Whenever there is an indication for a rectal examination, a proctosigmoidoscopic observation should precede the roentgenologic examination.

AUREOMYCIN CRYSTALLINE
in Tularemia

Tularemia, which is a serious problem in many parts of this country, can be successfully treated with aureomycin.

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Capsules: Bottles of 25, 50 mg. each capsule. Bottles of 16, 250 mg. each capsule.
Ophthalmic: Vials of 25 mg. with dropper; solution prepared by adding 5 cc. of distilled water.

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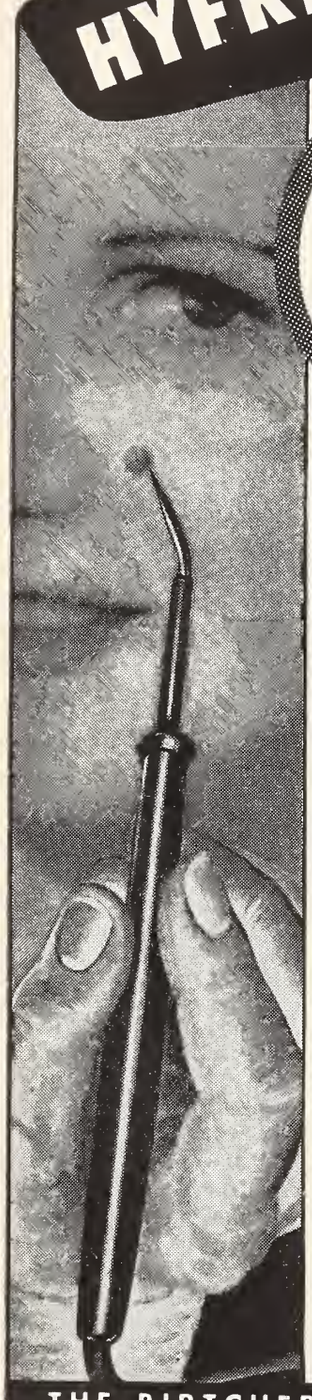

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Editorial Comment

SALUTE TO THE MEDICS

Despite lack of conspicuous military success for our arms in Korea, it is encouraging to note that army medicine is doing a bang-up job in easing the suffering of our wounded. Maj. Gen. Edgar Erskin Hume, top army surgeon in the Far East, is quoted by the United Press as having said the American soldiers wounded in Korea are recovering so rapidly they may beat the World War II medical record.

If the present rate of recovery continues, the last war's recovery rate of six out of seven wounded patients in United States military hospitals being returned to duty will be bettered.

Medical department personnel, Gen. Hume said, are ministering to the wounded on the front lines without immunity to shrapnel or bullets. The casualty rate among the medics is second only to the infantry.

In the Spanish-American war, 15 deaths resulted from typhoid fever to every one caused by enemy bullets. Conditions for the spread of this disease are present in Korea, yet so carefully have the medics planned their control of intestinal maladies, that not one case of typhoid has been reported.

For this conspicuous service the nation is grateful.—*Cleveland Plain Dealer,* August 19, 1950.

MICHIGAN'S FORGOTTEN

(Continued from Page 1144)

planning and construction of complete hospital facilities for 8,125 patients suffering from mental illness and tuberculosis. The new facilities would relieve the overcrowding of our present mental hospitals and provide treatment for those now waiting.

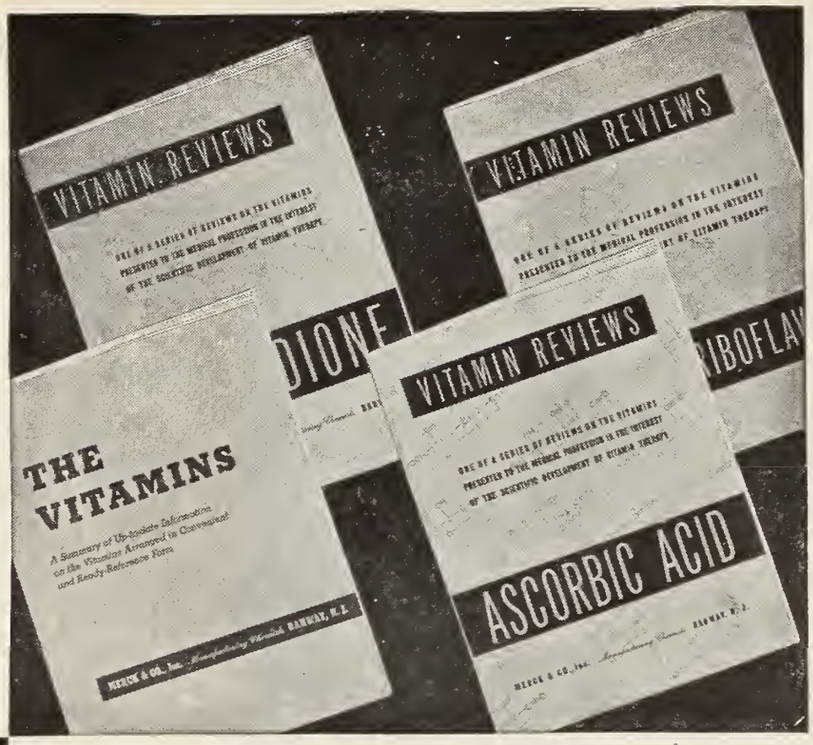
Michigan's doctors need not be told of the state's urgent need for new mental health facilities. Daily they are confronted with cases that form part of the critical situation. Every doctor in our state is therefore not only requested to vote YES on Proposal No. 2, but to help educate every citizen in the state on the urgent need for new mental hospitals. Only through active participation of leading citizens, such as our doctors, can this bond issue proposal to clear up our mental health situation be overwhelmingly approved with YES votes.

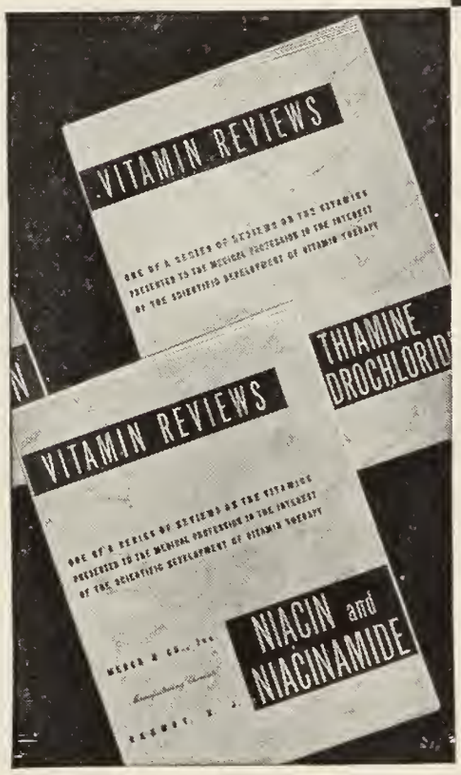
(Submitted by Citizens Education Committee on Bond Issue for Mental and Tuberculosis Hospitals. Published as information material.)

Say you saw it in the Journal of the Michigan State Medical Society

Concise Vitamin Facts

From Merck & Co., Inc. —where many of the individual vitamins were first synthesized.





These six Merck *Vitamin Reviews* are yours for the asking while the editions last. These concise reviews contain up-to-date, authoritative facts and can be most useful for quick reference. Please address requests for copies to Merck & Co., Inc., Rahway, N. J.

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MEDICAL EXHIBITORS ASSOCIATION TWENTIETH ANNIVERSARY

The Medical Exhibitors Association was founded in Detroit twenty years ago. This event was fittingly commemorated by the Michigan State Medical Society on the occasion of its eighty-fifth annual session in Detroit.

A Scroll of Appreciation was presented to the Medical Exhibitors Association, through its President Lauren H. Ashe of New York, by Michigan State Medical Society President C. E. Umphrey, M.D. of Detroit, on September 21 at the Book-Cadillac Hotel, Detroit. Approximately 100 Honor Guests, members of the MEA, as well as 310 exhibitors and their ladies, were present at the presentation ceremony which took place in the Grand Ballroom of the Book-Cadillac Hotel, Detroit.

The Scroll of Appreciation is inscribed as follows:

> In Commemoration of the
> FOUNDING IN DETROIT
> of the
> MEDICAL EXHIBITORS ASSOCIATION
>
> The Michigan State Medical Society congratulates this organization on twenty years of fruitful service rendered to its members and to the medical profession of North America.
>
> Michigan State Medical Society

On this occasion, also, the Michigan State Medical Society honored its Executive Director, William J. Burns, by the presentation of an illuminated parchment scroll. The recognition reads as follows:

> MICHIGAN STATE MEDICAL SOCIETY
>
> In recognition and appreciation of his excellent service in the development of a lasting and cordial liaison between the Medical Exhibitors Association and the Medical Profession in Michigan, this award is presented on the Twentieth Anniversary of the Medical Exhibitors Association to William J. Burns, Executive Director, MSMS. Dated this 21st day of September, 1950, at Detroit, Michigan.
>
> (Signed) C. E. Umphrey, M.D., *President*
> L. Fernald Foster, M.D., *Secretary*

Say you saw it in the Journal of the Michigan State Medical Society

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A Doctor Makes a Critical Survey of the Medical Profession

By Paul R. Hawley, M.D.

Chicago, Illinois

I HASTEN TO mention that the subject of this paper was not of my own selection. It was assigned to me by the Program Committee. Under other circumstances I would not presume to judge our profession—especially in public. However, my many years of service in the Army taught me never to refuse a duty, no matter how unpleasant. I do consider this a duty since, after accepting the kind invitation to speak at your meeting last year, I was forced by an unforeseen contingency to ask you to excuse me.

If I had at my disposal an unlimited amount of time, this would not be at all an unpleasant duty, because for every adverse criticism which can be levelled at the medical profession there are ten attributes which are matters for commendation. I could point out the tremendous advances in medical care in the past twenty-five years—advances in which American medicine has led the world. With the socialization of medical care in many European countries, medical progress lagged there, and the world capital of medicine moved westward across the Atlantic, where a free medical profession seized the torch and has since led the procession toward better health.

I could point out that we are the healthiest nation in the world, thanks to medical progress in this country. I know that proponents of compulsory health insurance like to argue that general mortality is slightly lower in some of the Scandinavian countries in which medicine has been socialized to a greater or lesser degree, but these people fail to state that Swedes live longer in Minnesota than they do in Sweden, and that Norwegians live longer in the Dakotas than they do in Norway. If the Scandinavian countries had, instead of their relatively pure racial strains, a polyglot population such as ours—with its several racial strains which are notoriously susceptible to different killing diseases—their general mortality would be significantly higher than ours. It is an incontrovertible fact that the conditions which affect health, which promote long life, are more favorable in the United States than in any other country of the world. You can't make a horse live as long as an elephant no matter how much medical care you give him, or how hygienic the surroundings in which you keep him.

I presume, however, that you did not invite me here to pay you pretty compliments, but rather to lay before you those characteristics and practices which seem to me to injure the medical profession—especially at this critical period in the history of American medicine.

It would be presumptuous if I were to confront you with personal criticism. Who am I to cast a stone at my professional brethren? I have sometimes been charged with ignorance of the problems of the private practice of medicine on the grounds that I have never engaged in private practice. This is not quite true—I have been in the private practice of medicine. Furthermore, my earliest memories are associated with the private practice of medicine. I was born, and grew to manhood, in a house in which two private practitioners lived—my grandfather and my father. Since 1942, I have had the closest possible association with hundreds of private practitioners. I have drunk deeply of their philosophy—and I assure you that I have, and I hold, the point of view of the finest element in American medicine. All this has taught me two facts—first, that the vast majority of

practicing physicians are able and honest men, devoted to the welfare of their patients; and, second, that, as in all walks of life including even the clergy, there are a few men in medicine who do things which bring discredit upon the entire profession.

Never in its history has the medical profession needed fine public relations as it does now. Most of you know that publicity and public relations are two entirely different things. What we need is the unqualified good will of all of the people; and I am going to talk to you about some things which, in my opinion, threaten this great asset of public good will. I am going to discuss several charges which the public frequently hurls against the medical profession. Some of these may come as a surprise to most of you. Lay people do not often offer criticism of the medical profession to honest and able physicians. In the first place, they do not like to be rude; and, in the second place, such criticisms are not applicable to the better practitioners.

But, I am in a different position. I travel about the country much of the time. I am frequently engaged in conversation by people who do not know who I am. I have a wide acquaintance among industrialists, lawyers and business people who, because of my peculiar relationship to medicine, are franker with me than perhaps they would be with their family physicians. So, perhaps I hear more criticism of the medical profession than does the average physician.

I pay no attention to the criticisms of the chronic complainers, of the Socialists and Communists, and their fellow-travelers—not to anything that Mr. Oscar Ewing says, or, for that matter, that other people even more highly placed in the Government say—but the criticisms of men known to be devoted to the preservation of free enterprise, and of the little man who harbors no prejudice, deserve our most careful consideration. It is to these, and to these only, that I shall address myself.

Beyond question, the commonest criticism of the medical profession is that their fees are excessive. The majority of people think that doctors are getting rich by soaking the public for all that the traffic will bear. Even a casual examination of the records of the probate courts of this country would show the fallacy of such an idea. The estates of deceased doctors are notoriously small.

Criticism of this nature should remind us forcibly that it is a human failing to generalize—that people tend to magnify the exception and to disregard the rule, and that one case of an exorbitant fee does us more harm than 100 cases of reasonable fees. It was more than 175 years ago that Edmund Burke said: "I would not know how to draw up an indictment against an entire people," but too many Americans are willing to rush in where Edmund Burke feared to tread.

A study of the total amount of medical fees paid in this country shows that they have not risen nearly so much as has the general cost of living. This is evidence that the medical profession as a whole are not gouging the public. On the other hand, scarcely a week passes in which there is not brought to my personal attention a case of a completely unreasonable medical fee.

To select two or three at random, a good doctor friend of mine is a member of one of the local advisory boards of the medical care plan of the United Mine Workers. Not long ago, a case for submucous resection was referred by the United Mine Workers to a young nose and throat man who had been practicing his specialty only a year or so. He presented a bill for $600. The medical advisory board called him before them and tried to get him to reduce his fee, since the patient was a poor miner who could not himself have afforded to pay one-sixth of that charge. The doctor was adamant, and the advisory board could do nothing more than to advise that the fee be not paid. There have been rumors of excessive fees charged the United Mine Workers Fund, and hints that their system of paying fees for service might soon be changed. The goose that lays the golden egg is always in danger of being killed by some irresponsible person.

A Blue Shield subscriber recently underwent a partial gastric resection. For this operation, the Blue Shield fee was $200—not enough for a well-to-do patient but more than could be collected from a medically indigent patient. This patient was not medically indigent, but he was far from being a wealthy man. The surgeon's bill was $4,500. This did two things to the patient: it soured him against medical insurance, and it made him mad as hell at the entire medical profession.

Not long ago, one of the girls in our office had to have an operation. It was not a long and difficult operation nor one that required much after-care. For this operation, Blue Shield allows

$100. She consulted a surgeon who told her his minimum fee is $500. This girl makes about $60 a week. She had saved $200 against the operation which, with her Blue Cross and Blue Shield protection, she had hoped would cover her expense.

I mentioned this to a good doctor friend of mine —who, by the way, is a very distinguished surgeon and one whose ability would entitle him to charge high fees—and he figuratively "hit the ceiling." He said, "We are always saying that no deserving person ever goes without medical care because they are unable to pay for it. Here is a case which needs medical care badly, she is willing and able to pay a reasonable fee, but she must go without this care if she is required to pay a fee like that. This is just playing into Oscar Ewing's hands." . . . Fortunately, this case had a happy ending. An arrangement was made with another competent surgeon to do the work within the girl's budget.

Such cases are exceptional, but they happen too often for comfort. We must never forget that the public remembers such cases long after it forgets about the thousands of other cases that get medical care at costs the patients can afford to pay, or at no cost at all.

The next most frequent criticism I hear is that doctors are becoming very independent, largely because of the amount of money they are making. People complain that it is often difficult and sometimes impossible to get a doctor outside of the usual eight-hour working day. It is charged that doctors "hole up" after 4:00 p.m. and refuse to answer the phone. That this is a criticism of some merit is indicated by the action taken by several medical societies to correct the situation. These societies maintain a twenty-four-hour telephone service and will locate a doctor for any person who calls to say that he is unable to find one.

It is not necessary to discuss the other criticisms that one hears occasionally—charges of fee-splitting, of rebates upon spectacles and other medical appliances, of restricting the number of medical students, and the like. There is not a man in this room who does not know that there are some dishonest men in the medical profession. However, having disposed of the criticisms by the general public, I have one of my own.

This is that too many physicians are failing in their duty to protect the voluntary health insurance plans from abuses. There is that curious defect in our moral code which makes it no sin to defraud insurance companies—any kind of an insurance company.

Most Blue Cross plans, for obvious reasons, exclude hospital admission for diagnostic purposes from their benefits. Yet thousands of Blue Cross subscribers are sent to hospitals each month solely for x-ray or clinical laboratory examinations, or both. The Blue Cross form is executed to make it appear that the patient was hospitalized for treatment.

Even when the subscriber is admitted for bona fide treatment, thousands of unnecessary examinations and tests are ordered. Residents and interns are the principal offenders in this respect—since they want to impress their attending staff with their thorough work-up of patients—but too many attending physicians and surgeons are indifferent to this practice and make no effort to control it.

A good friend of mine, who is a senior attending physician in one of the better voluntary hospitals in this country—*not* in Chicago—recently told me that he had checked the charts of several hundred admissions to this hospital. "Routine blood chemistry" had been ordered for a large proportion of Blue Cross patients regardless of the cause of admission. When questioned about this, the resident replied, "Why not? It doesn't cost them anything." It is true that there are the occasional obscure cases in which all sorts of tests are justifiable in order to obtain a clue, but physical diagnosis has sunk to a low level when complete blood chemistries are necessary in a high proportion of cases.

This practice is entirely too prevalent. True, the individual patient does not pay out-of-pocket at once for these unnecessary procedures, but he *does* pay and so does every other Blue Cross subscriber. It isn't much in one case, but, in the aggregate, it is costing Blue Cross subscribers millions of dollars annually.

I have selected an average Blue Cross plan with 100,000 subscribers to illustrate this point. In recent years, about 12,000 subscribers will be hospitalized during one year. This is too many, but this is what is happening. Each hospital admission costs every other subscriber of this plan seven one-hundredths of one cent. This is an insignificant sum. However, if this plan is required to hospitalize 13,000 in a year, or if the average stay in hospital is increased by one day, each subscriber must pay 70 cents more for his protection. This raises the family rate $1.80. Since Blue

Cross nationally returns around 90 cents of each subscribers' dollar in direct benefits and adds only a penny or two to reserves, there is scarcely a Blue Cross plan in the country which can absorb this extra cost. The result is that rates must be raised.

Too many people—doctors included—seem to think that voluntary health insurance *lowers* the cost of medical care. It doesn't lower it one penny—it only spreads it; and, when we keep on spreading the costs of unnecessary medical care, we raise the cost of the protection to the point where we squeeze out the very people who need it most. When we squeeze enough of these people out, we will have compulsory health inusrance —and who will be to blame?

As regards medical bills, there are still too many doctors who use insurance benefits as a platform upon which to erect an additional fee. For example, if the doctor would charge an uninsured person a fee of $100, and he discovers that the patient is insured and that the insurance benefit is $75, he will set his fee at $125, $150 or even $175. While the number of physicians engaging in such practices may be small, it is still large enough to plague Blue Shield and to bring discredit upon the entire voluntary prepayment movement.

This brings us to the crux of this problem. Criticism, to be of full value, must be constructive. So, what are we going to do about such charges? Are we going to pursue our traditional course of ignoring them, of denying them, and of taking the position that none of us is his brother's keeper? This course has served the medical profession well for many centuries—but let's not forget that the medical profession has never been under such hot fire as it is today, and that our time-honored defenses, or lack of defenses, are beginning to show danger of failing us in this critical period.

After many years of negative action, the medical profession has recently adopted a policy of positive action—positive action externally, that is. It is now taking the offensive against the forces which would socialize medical care in this country. This is fine—but is it enough?

For one, I don't think it is. It is my considered opinion that, if we are going to win this fight, we must take positive action internally. What kind of action? Well, since I have had the temerity to point a spotlight at some of our vulnerable points, I shall stick my neck out a little farther and tell you what I think we should do.

We have one tremendous advantage in that we can start with the knowledge that the vast majority of American doctors are honest, are able, place interest of their patients before their own interests. We must exploit this advantage to the fullest.

Second, we must remember that we are always judged by the company we keep. So long as honest and able physicians grant full professional fellowship to those who are guilty of bringing discredit upon the medical profession, or of giving it a bad reputation among the public, they must expect to be placed in the same class with the undesirable element. We have boasted for too many years that membership in the medical society is the medical profession's seal of approval upon a doctor. The public has been educated to believe this. Now we are stuck with it, which places us all in the position of condoning those practices to which the public is objecting, and of defending the small number of doctors who are alienating the friends of the medical profession.

Now, as to corrective measures for our own self-protection. The criticism of excessive fees should be the simplest of all to avoid. All that is necessary is that the doctor habitually discuss the fee with the patient *before*—not after—the treatment is begun, and *then*—not later—reach an agreement. I would defend to my last breath the right of a doctor to set a minimum fee of $5,000 for an appendectomy. No one should presume to tell anyone—doctor or motor mechanic —what value he should place upon his services. The only justifiable restriction is that the price is understood before the services are rendered. There is not the slightest ground for complaint if the fee has been agreed upon before the patient is obligated. If no agreement can be reached, the patient is free to seek the service elsewhere.

Since time immemorial, prior discussion of fees has been regarded as somewhat undignified. I don't know why it should be. There is scarcely a man in this room who would not inquire of a lawyer what the cost of a legal action will be before he undertakes one. Such a practice does not smack of the market place or of the repair shop. Certainly the profession of law is as jealous of its dignity as any other profession—even though lawyers themselves are more prone to insult it than are doctors to offend against their own pro-

fessional dignity. There is no necesssity for bargaining with a patient—for haggling over price. All that is necessary is that the doctor inquire into the ability of the patient to pay, and to set his fee commensurately. If the patient objects, the matter is closed. But it is essential that this be done before rather than after the fact of treatment. After all, isn't it a little dishonest to wait until the patient can no longer decline the arrangement before confronting him with the charge?

More and more of the better men in medicine are adopting this practice of obtaining an agreement upon the fee before undertaking treatment. By this, I do not, of course, mean that the doctor contracts to cure a condition for a fixed fee, but he can tell the patient in advance what will be charged for each service rendered. This leaves the patient free to break off the arrangement whenever he feels that the total cost is too great. As for the surgeon, he can set his fee for the operation and for all anticipated after-care. He can inform the patient of the extent of the treatment covered, and that unforeseen complications or sequellae are another matter.

I know one surgeon-teacher who holds clinics with his senior medical students upon prior arrangement of fees. He tells me that, when he explains the purpose, he has no difficulty in obtaining the consent of patients, or the responsible members of their families, to the discussion of fees in the presence of three or four students. At this conference, the person responsible for the bill outlines his financial situation. The students, already aware of the nature of the operation, then retire and estimate the proper amount of the fee. This professor tells me that, in their first experiences, the students are prone to suggest outrageous fees—which may be reflections both upon the general concept of medical fees among the public and upon the motives of students of medicine. Some young men may choose medicine as a profession because they hope to get rich through its practice.

I recently heard of one surgeon who boasts that he always tells the patient before he operates what the fee will be—but that he leans over the cart to tell him as he is being wheeled into the operating room. Another variation came to my personal attention a few weeks ago. In a preliminary discussion, the surgeon and the patient had agreed upon the fee. Before entering the hospital, however, the patient received a letter from the surgeon which stated that the fee must be paid in full 24 hours before the operation was done. I saw the letter. I suppose no one should criticize the business methods of anyone so long as they are not dishonest, but I can assure you that this patient was very annoyed and that this action won no friends for the medical profession.

I am convinced that the agreement upon fees before treatment is begun is a very important need in the public relations of the medical profession.

One move in the direction of resolving complaints over excessive fees has been made in several medical societies—both state and county. This is the appointment of a Grievance Committee to whom the patient may bring his complaint, whether it be a question of fee or a question of inadequate or improper service. While I feel very strongly that all disagreements over fees should be settled before rather than after the bill is rendered, there is a great field for Grievance Committees in improving the public relations of medicine. Whether or not the committee is able to be of assistance to the patient, it gives the patient much satisfaction merely to air his grievance—as every psychologist knows.

However, unless it is established firmly upon certain principles, a Grievance Committee can do the profession more harm than good. It can become a boomerang. It can invite the charge that it is a white-washing agency, operated only in the interest of the doctors themselves. The essential principles upon which an effective Grievance Committee can operate are:

1. The members must be selected with the greatest care. They must be men who are devoted to their profession, jealous of its reputation as well as of its prosperity. The selection of the membership of the committee must be upon an individual basis rather than upon an *ex officio* basis.

2. Tenure of office in the committee must be relatively long. The members must become familiar with the problems and learn the best ways of dealing with them.

3. Appointment to the committee should remove the member entirely from medical politics. He must be free to follow his best judgment without the fear of reprisal. His situation must be comparable to that of an appointed federal judge, rather than to that of an elected county judge.

4. With a few possible exceptions of local medical societies in large metropolitan areas, the Griev-

ance Committee should be an agency of the state medical association. I do not need to explain the impossibility of sitting in judgment upon a fellow-practitioner with whom one is called upon to associate frequently. We all know the futility of disciplinary programs in the average county medical society.

5. The committee should be large enough to permit of the disqualification of any member who is intimately acquainted with, or who resides and practices in the vicinity of, the physician called before the committee.

If these principles are observed, a Grievance Committee can be a great credit to the medical profession as well as a protector of the public. However, I repeat that the employment of such a committee is the method of second choice in dealing with disputes over fees. The great usefulness of a Grievance Committee lies in other fields of the public relations of medicine.

I have already touched upon the way in which some medical societies are dealing with the problem of obtaining a physician promptly at times outside of regular business hours. It is the finest kind of public relations to educate people to look to the local medical society for assistance. However, if the society has only a paper plan, or if it does not fully provide the service it professes to offer, this, too, can become a boomerang. My only suggestion for the improvement of the service of providing a physician in an emergency is that the society obtain agreement of each of its members to be available on a specified day or days of the month, and that such members religiously observe their commitments. Otherwise this is a hit or miss arrangement which is in constant danger of breaking down in a real emergency.

As to the protection of Blue Shield and Blue Cross, we either do it or we resign ourselves to socialized medicine. Almost everyone, including our opponents, is agreed that the only important barrier to the socialization of medical care is the successful operation of voluntary health insurance. This operation cannot be successful if the prepayment plans—whether commercial or voluntary nonprofit—are constantly milked for all the traffic will bear by thoughtless, or indifferent, or unscrupulous doctors. If the medical profession itself does not reverse the present trend—and fast—voluntary health insurance *will* fail because its cost will price it out of its most important market. When that happens, our goose is cooked. Doctors are the only protectors of voluntary insurance. There are no others. Shall we see that they discharge this responsibility, or shall we permit the abuses to continue?

How do we go about getting the medical profession to protect voluntary insurance? First and foremost, we must arouse the profession to the critical danger to voluntary insurance. We must educate them upon the very basic principles of insurance. We must make them insurance conscious, so that their every move will be tempered with consideration of the effect upon voluntary insurance. This is not to suggest that the patient be denied a single essential service, but only that nonessential services be eliminated. Hospital staffs should be alert to abuses within their hospitals—abuses by staff members as well as abuses by residents and interns.

Second, we must be prepared to deal with constant offenders against voluntary insurance as we would deal with any other type of unethical practice which harms the medical profession. Regardless of the popular concept of morality, it is just as much of a sin, just as much of a crime, to bilk an insurance agency, as it is to defraud an individual citizen.

If the majority of doctors agree that certain practices are harmful to the medical profession, they must register their disapproval in a positive and public manner. They can do this only by limiting membership in professional societies to those who are a credit to the profession rather than a discredit. This is merely obedience to the law of self-preservation.

Let's never for a moment forget one fact—we cannot win this fight against socialized medicine for at least ten years, but we can lose it at any moment. Once it comes, it will be with us always—as is evidenced by the history of other countries. There is no retracing of steps toward Socialism. As you well know, the Conservative Party in Britain, during the pre-election campaign, promised to retain the National Health Scheme if elected.

We can postpone socialized medicine this year, but it will threaten again next year. Our only hope for defeating it for once and all lies in our searching for the causes of discontent, for our own vulnerable points, and removing them without further delay.

Only the medical profession itself can do this. We appreciate the necessity. We have the will. The only question is: do we have the courage?

Obesity—A Complication in Carcinoma Cervix Uteri

By R. C. Hildreth, M.D.
Kalamazoo, Michigan

THE FAT woman, before or after forty, has another one of life's burdens to bear when she develops cancer of the cervix. Since the general practitioner already recognizes the psychosomatic factors of overeating so ever present in the obese woman, this discussion primarily points out difficulties in management of cervix carcinoma in that type of individual. Further interest is found in the effect of obesity on five-year survival figures.

Material

For ease of discussion and statistical review, we have analyzed twenty-four consecutive patients, who, when first seen, were over 170 pounds in weight (Table I). All had positive biopsy diagnosis of carcinoma of the cervix uteri. All were treated between the years 1936 and 1943, so that five-year cure figures are available. A figure of 170 pounds was arbitrarily chosen since it is 20 per cent above the ideal weight for a woman 5 feet 7 inches in height as recorded in tables by Newburgh.[1] Few women treatment patients exceed this height.

As to the number of women with cervix cancer who weigh over 170 pounds compared to the number weighing less than 170 pounds, we have resorted to a listing of 263 patients seen in our office between 1923 and 1949 (Tables II and III). Of cervix cancer cases seen in the twenty-six-year period, 12 per cent weighed over 170 pounds when first seen.

The fact that obesity rose to 24 per cent in frequency between the years of 1936 and 1943 is of interest, but is unexplained.

Obesity as an added burden all too frequently raises its ugly head as a challenge to the radiotherapist.

TABLE I --- Classification and Survival Table for Obese Group -- 1936-1943

Cancer of Cervix Uteri

Year First Seen	Clinical Grade (Schmitz) *	1	2	3	4	Broders *	1	2	3	4	Living & Well 5 Yrs.	Dead	Total of Cases	Absolute 5 year Survival
1936			1	2				1	2		2	1	3	
1937			1	2		1		1	1			3	3	
1938				1	1			1	1			2	2	
1939				1	2			1	2		1	2	3	
1940				1	1	1			1			2	2	
1941				2				1	1		1	1	2	
1942	1	3	2	1				2	5		5	2	7	
1943			1	1			1	1				2	2	
					24					24	9	15	24	37.5%

* Unclassified or Adeno Carcinoma

Diagnosis

In the care of cervix cancer patients, complications of associated obesity appear in the first step of diagnosis. Is there a physician who hasn't thought to himself, "How will I ever get this fat woman onto the examination table?"

From the Radiologic Office of Drs. Jackson, Hildreth, Volderauer, Pearson and Chrest.

Increased difficulties in performance of bimanual examination and other diagnostic pelvic procedures are factors which may throw some doubt on the accuracy of clinical classification of cervix lesions in the obese. In both the obese and non-obese group, approximately 70 per cent of the cases were graded three or four by Schmitz' classification when first seen. Following thirty-six daily x-ray treatments, re-examination under anesthesia, used primarily for the purpose of applying radium, usually shows beginning regression of the neoplasm and marked decrease in secondary infection. Clinical classification is re-evaluated at this time.

Broders' method of microscopic differentiation or gradation of cancer is shown in Table III as making its appearance in 1933. The special group of fat women does not greatly vary in gradation from the total group as far as Broders' classification is concerned.

The factor of age, in its relation to the diagnosis of cervix cancer, reveals that half of all cases are discovered between the ages of forty and sixty. Again the important point that more than 20 per cent of cervix cancer is found in patients under the age of forty years is substantiated in review of the entire 263 cases. In age range, the average of the obese female group does not vary significantly from the non-obese.

TABLE II --- Classification and Survival Table for Non-Obese Group -- 1936-1943

Cancer of Cervix Uteri

Year First Seen	Clinical Grade (Schmitz)					Broders					Living & Well 5 Yrs.	Dead	Total No. of Cases	Absolute 5 year Survival
	*	1	2	3	4	*	1	2	3	4				
1936				4	2	4			1	1	1	5	6	
1937	1			3	1	1			2	2	4	1	5	
1938		1	1	6	4	1			4	5	1	3	9	12
1939	1			4	5	1	4			1	6	6	5	11
1940				1	10	1	1	1	2	7		8	4	12
1941				2	2	3				5	2	4	3	7
1942				1	6	2	2			3	3	1	7	2	9
1943	2			1	7	3	2	3	6	2		8	5	13
						75					73	41	34	75	54.6%

* Unclassified or Adeno Carcinoma

Complications

In general, the more advanced one finds a disease at the time the patient is first seen, the more one anticipates complications. Cancer of the cervix is no exception to this rule. Improvement in preliminary diagnostic procedures, technical treatment factors and accurate dosage determinations have been extremely important to the radiologist in lowering overall cervix cancer complications. Clinical experience in the group of 263 cases has shown that a prolonged series of x-ray before radium application is one factor in cleaning infection from the neoplasm.[3] Infection in a cancer makes the lesion much more radio-resistant. Infection often furnishes a supply depot for the formation of complications.

Fistulae are recorded in six cases in the total of 207 patients seen since 1936. Four of these were considered terminal affairs. Operative correction was successful in one of the other two, and this patient is living and well at four years.

Three cases had post-treatment complete bowel obstruction, two of which were terminal. True pyometria is still encountered in about 1 per cent of cervix cancer cases. Urinary complications, other than fistulae, occur in the form of hydronephrosis from ureteral obstruction. More frequent and early use of the intravenous urogram

TABLE III --- Classification, Gradation and Absolute Survival Table for Carcinoma of the Cervix Uteri

Year First Seen	Clinical Grade (Schmitz)					Broders					Year of Death			Total Dead	Total No. of Cases	Absolute 5 year Survival
	**	1	2	3	4	*	1	2	3	4	Under 1 yr.	1-2 yr.	2-5 yr.			
1923	3		1	3	4	10					4	3		7	11	
1924	2			3		4					3	1		4	5	
1925	2		1	5	2	10					6	1	2	9	10	
1926	1		1	1		3					2	1		3	3	
1927															0	
1928	1			2		3					2	1		3	3	
1929				2		2					2			2	2	
1930			1			1									1	
1931				3	1	4					2	1		3	4	
1932			1	2	1	3					1	2		3	4	
1933				1	1	1		1			2			2	2	
1934	1		1	3				1	3		4			4	5	
1935			1	4	1			1	4	1	3	1		4	6	
					56					52				44	56	21.4%
1936			1	6	2	4		2	3		5	1		6	9	
1937	1		1	5	1	2		3	3			3	1	4	8	
1938		1	1	7	5	1		5	6	1	6	3	2	11	14	
1939		2		9	3	4		2	8		5	2		7	14	
1940			1	11	2	2	1	3	7		4	2		6	14	
1941			2	4	3			6	3		2	1	1	4	9	
1942		1	4	8	3	2		5	8	1	1	1	2	4	16	
1943	2		2	8	3	2	4	7	2		5	2		7	15	
					99					97				49	99	50.5%
1944	3		2	10	3	2	1	5	7	1	7	1		8	18	
1945	1		4	9	6	2	1	7	10		3	4	3	10	20	
1946	1		10	14	3	1	1	9	17		6	3		9	28	
1947		1	8	6	4		5	11	3		5	1		6	19	
1948	1	2	9	10	1		10	9	4					0	23	
					108					105				33	108	
														Total	263	

** Unclassified.
* Ungraded or Adenocarcinoma. About 5% in this series were Adenocarcinoma.

study has materially assisted in evaluation of urinary complications. Post-irradiation proctitis of slight or moderate degree occurs in about 10 per cent of cases. Although no severe post-irradiation proctitis cases are recorded, one anticipates a higher percentage of this pathologic condition in the obese patient due to the fact that accurate tumor dose calculation is more difficult.

Two diagnostic studies now routinely used for recognition of complications arising from irradiation overdosage are employed, namely, the performance of barium enema and intravenous urograms on all cervix cancers (as soon as possible after the diagnosis is made). Information obtained from these studies is often invaluable in later case care and evaluation of complications, especially in reference to blocking of a ureter or detection of post-irradiation rectal changes as much as a year or two later.

Complications following any type of treatment of disease as serious as cervix cancer, will always be with us to a certain degree. Some assurance is found in the fact that complications are less common than they used to be. Also worthy of note is the fact that in none of the total of 263 cases did we find the irradiation type of treatment given, responsible for immediate cause of death. This is one very definite advantage that irradiation treatment gains over the surgical type of treatment for cancer of the cervix.

Treatment

Technical difficulties encountered in irradiation of the obese individual have caused the radiologist to adapt several special methods of treatment for this type of person, just as the surgeon needs to adjust his routine for the obese individual. Emphasis is placed on multiple divided x-ray doses. We prolong the treatments over a long period of time in the overweight individual. This aids one to deliver more irradiation into the tumor through the heavy layers of fat. A Holdfelder pressure

type of cone becomes of great value in the heavy person for it permits pressing aside several cms. of fat tissue which would otherwise cut down the percentage of surface dose reaching the tumor. A third technical factor often made use of is longer treatment distance.[5] Since 1946, a 100 cm. target skin distance has been routinely used. Even though this causes the treatment to take four times the length of exposure necessary when one uses a 50 cm. target distance (forty-minute instead of ten-minute daily treatments), a better depth dose and a more uniform x-ray beam is obtained.

A fourth technical factor, now more or less routinely used by radiologists in heavy patients, is a slight increase in voltage and filter over and above the standard 200 kv.p., ½ mm. copper filter factors set up in the 1920's as "deep therapy." This also technically aids the deliverance of a greater amount of x-ray dose at the depth of the tumor.

The significance of individualization in dosage calculation and treatment of the cervix cancer patient can hardly be over-emphasized.[2] Such individualization is necessary not only in the obese woman, but also in cancer of the cervix stump. Whether stump cancer occurs some years following partial hysterectomy, as is commonly the case, or is present at the time of such a procedure, its successful treatment by irradiation has been greatly complicated. Proper irradiation dosage levels can seldom be obtained following removal of the body of the uterus since the receptacle for radium placement is absent. In addition, radiation effect is decreased because of surgical intereference with the vascular bed to be irradiated.

The total irradiation dose that is actually delivered to the neoplasm has risen considerably as years have passed. Six patients treated before 1936, with seemingly small irradiation doses are living and well five years later. This indicates the variation in response of cancers to irradiation in different individuals. Although certain dosage standards are set up as being necessary for the sterilization of certain types of carcinomas, experience shows that some patients have their cancers cured with less than average amounts of irradiation.

In radium work, one is often permitted to take advantage of a slightly higher radium dosage when working in an above average diameter pelvis, because colpostat corks can be fitted farther away from the midline.[1] Frontal and lateral diagnostic roentgenograms have been taken on all radium cases since 1936, and these are invaluable as an aid to determining proper radium dosage. If one anticipates approximately sixty hours of radium application, then diagnostic roentgenograms for position determination are usually taken at the twenty-four-hour interval.

There is the occasional case where radium is used before x-ray particularly when it is important to stop severe bleeding. Adequate biopsy is employed almost without discrimination, yet technical care in the handling of any neoplastic cervix is emphasized in this series of cases. Few cervices were ever grasped with tenacula and none were ever dilated larger than 7 mm. in diameter for radium application.

Survival Statistics

Local community physicians have assisted the recording of survival figures in all reported cases. Table III shows absolute five-year survival figures of 21.4 per cent in cases before 1936 and 50.5 per cent survival figures in that group treated between 1936 and 1943. The great majority of this latter group had the advantage of adequate irradiation doses of both x-ray and radium, whereas only six cases reported prior to 1936 received radium treatment.

The obese group of twenty-four patients has a five-year survival rate of only 37.5 per cent as compared to a 54 per cent rate in the non-obese treated during the 1936-1943 time interval grouping.

The recording of year of death in Table III points to the importance of close patient follow-up observation during the twenty-four-month interval following treatment.

If the patient is free from clinical evidence of active pelvic neoplastic disease twenty-four months after treatment, the chances are high that she will be a five-year cure case. On the other hand, the clinical gradation of extent of the disease at the time the patient is first seen remains as the best prognostic criterion during the first year interval.

Difficulties in determining the extent of the disease in the obese is again mentioned. The gradual rising five-year cure percentage in cervix cancer treated by irradiation methods is encouraging and is partly due to the fact that the patient today reports to her physician earlier in the course of her disease.

(Continued on Page 1204)

Role of Anoxia and Dietary Deficiency in Various Clinical States Including Malignancy

A Preliminary Report

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SINCE THE WAR, I have seen several severe cases of cirrhosis in women whose alcoholic intake seemed to me to be very moderate. There was severe anemia, often microcytic or normocytic. The only common factor was a diet grossly inadequate in all the quality factors. Deficiency of protein, minerals and vitamins was severe. Having recently written on the Rh factor and been intrigued by the anoxia of the brain in erythroblastosis, I could not help wondering if the dietary deficiency with its concomitant anemia might not be conditioning factors causing an anoxic state in the liver and making it peculiarly sensitive to hepatotoxins, especially alcohol, the liver disease in turn aggravating the anemia and forming a vicious circle.

Review of Literature on Anoxia, Experimental and Clinical

In a review of the literature I came upon the work of many men here and abroad on the effect of anoxia on the various tissues, but especially on the physiologically active glandular organs. For brevity, these are condensed below.

Boyd[2] proved that animals in a gas chamber with low oxygen tension get an atrophy and degeneration of the liver cells with no jaundice. Hepatotoxins are lacking.

Chaikoff et al[5] caused cirrhosis in animals by continued high fat diets. Lillie[18] showed it in rats on a low protein diet.

Gyorgy and Goldblatt[14] caused liver degeneration and neuritic changes on a diet low in B complex but with added thiamin, riboflavin, and pyrodoxin. Adding cystine hurried the origin of cirrhosis.

Daft, Sebrell, and Lillie[6] confirmed this and showed it could be prevented by choline, methionine, or casein. They felt that cirrhosis in its first stage is a fatty infiltration which damages the liver cells mechanically, interfering with their nutrition and oxygen supply. I think this is partially correct. It may also result from other deficiencies that favor fat deposition or deprive the liver cells of the elements needed for their metabolism.

Miller and Whipple[20] show that many alcoholics have polyneuritis, from B_1 lack, as well as having pellagra and anemia. These are due to other dietary deficiencies.

Patek and Post[21] say that diets high in vitamins alleviated deficiencies and improved liver tone; diets improved by minerals and protein also help. Wohl[24] states that animals on diets low in protein and choline get cirrhosis, hemorrhage and necrosis of the liver; that diets low in K can cause hypoprothrombinemia, but he thinks it would be rare in humans.

Mueller and Rotter[10] reported in 1942, anoxia states that showed liver changes.

Kritzler[10] in 1944 showed the presence of fat free and glycogen free vacuoles in 27 cases of fatal high level anoxias and in CO poisoning too.

O. A. Trowell,[10] of the University of Edinburgh, showed in classical experiments that *in vivo* vacuolization of the liver cells occurs if animals are bled enough to threaten life. If the animal dies of anoxia or asphyxia, vacuoles develop rapidly if the animal is not bled out. If the liver has more than a moderate amount of glycogen, this may not occur. This is shown in the rat, guinea pig and monkey. There must be pressure in the sinusoids, plus the anoxia for it to occur; raising the pressure augments the effect. He thinks that the anoxia affects the wall of the sinusoids to increase their permeability, allowing transfer of fluids; also that the vacuoles are a watery phase surrounded by a precipitation membrane from the rest of the cytoplasm, which is probably a viscous colloid solution. Saline in the bile canaliculi vacuolizes an anoxic cell, not a normal one.

R. E. Buck,[3] in Salt Lake City in 1948, showed by biopsies, that alcoholic livers shown to be fatty, clear rapidly to normal with good diet and care. He felt that these were precirrhotic cirrhosis.

Joseph and Theodore Gillman,[10] of Johannesburg, S.A., wrote very exhaustively on the effect of anoxia on the liver. Their work, and that of Trowell[10] and the Air Force medics were unknown to me until I had suspected that anoxia might be a potent factor in cirrhosis. Trowell[10] suggests that anoxic livers were the same as the livers of protein deficient animals. The Gillmans[10] saw vacuolization of the liver cells in pellagra in 1945,

after fatal hemorrhage, CO poisoning, prussic acid poisoning, stillborns, and cases dying of severe trauma. There were vacuolized cells and plant-cell-like cells in the the same livers. They think that chemical changes must precede morphological changes. Enzymes may play a part. They examined 275 livers; some eighty-seven cases were posted, some within twenty minutes. The liver cells showed either vacuoles or a plant cell-like change. Mallory[10] described this vacuole in 1911, Pappenheimer and Hawthorne[10] in 1936, and Mueller and Rotter[10] in 1942, Buchner and Pitchotka[10] in 1942, Ladewig[10] in 1943, and Kritzler,[10] in the heart, pancreas, eosinophils of the pituitary as well as the liver. Kidney cells had a watery swelling, and the capillary endothelial cells were swollen till the lumen was almost obliterated. After these changes may come necrosis. The previous changes may be reversible. Gillmans[10] 275 cases were suicidal hanging, judicial hanging, throttling, Prussic acid, and CO poisoning, lightning, drowning, stabs of heart and great arteries, trauma, ruptured ectopics, and stillborns. These all showed changes they attributed to acute anoxia. Elman et al[10] in 1943 produced in cats and dogs on a high CH, low protein, low fat diet, the plant cell type of change in the liver cells. Ashburne et al[10] in 1943, showed vacuolization on prolonged diets to which sulphaguanidine had been added, often necrosis and arterial damage in the heart and other organs. Tannenburg,[23] in 1939, showed vacuolar changes in the heart, liver, and skeletal muscle cells in insulin shock in rabbits, also in the brain of rats. The Gillmans[10] got, by biopsy, from the liver of pellagrins, plant cell changes similar to Elman's[10] dogs. Dr. Hartman[15] of Detroit showed the hepatotoxic effect of tannic acid on some livers in burn cases. The shock state of some cases may have laid the ground for the toxic action of the acid which ensued.

Meienburg and Snell[19] reported forty-seven of fifty GIs from Jap prison camps showed liver changes from slight hepatitis to cirrhosis, all clearing with diet. This agrees with the work of the Gillmans,[10] and Fernando, Mendoza, and Rajasuriya[8] of Ceylon. Gillman[10] says that 80 per cent of the native Bantu tribe have cirrhosis. They eat only maize and fermented milk as a rule. Burdette and Wilhelm,[4] in 1946, reported oxygen uptake of slices of rat heart muscle in the terminal stages of prolonged severe hemorrhagic shock is less than normal in the absence of substrates. Pyruvate offsets this to a degree. Grieg[13] in 1944 showed that anoxic tissue shows decreased ability to metabolize lactic acid.

J. L. Henderson[16] reported a case of cirrhosis in a stillborn erythroblastic infant. I[1] suggested kernicterus as probably being anoxic. Zelman et al[25] reported a case of hepato-lenticular degeneration (Wilson's disease) successfully treated with Cytochrome C, an enzyme needed if O_2 is to be available to tissue. While it was given there was dramatic improvement, with reversal of many changes. Unfortunately, their supply was exhausted, and the patient relapsed and died. The autopsy showed the same changes shown by the high level anoxias of Kritzler[10] and others, as well as the cases of the Gillmans[10] listed above.

All these experiments, and clinical and autopsy reports emphasize the vital import of O_2 to living cells, especially the physiologically active parenchymal cells. The more highly specialized a cell is, the greater its need for O_2, and the less it can withstand O_2 lack. O_2 is needed to maintain its integrity, and for repair and regeneration. Normal physiological processes must be upset by O_2 lack long before morphological changes ensue. The similarity of tissue change in acute anoxia to that of deficiency states indicates that either the end result is the same from two different causes or that both instances are anoxias, the deficiency state in some way making O_2 unavailable to the tissue as with Cytochrome C lack in Wilson's disease as listed above.

The cases listed above by the various authors occurred in such extremes of nutrition as from the robust young aviators to the grossly deficient Bantus, and the American Jap prisoners. Gillmans[10] thought the changes seen in acute anoxic deaths were duplicated in their Bantu cirrhotics and pellagrins, the latter of course being based on dietary deficiency.

Many of our deficiency and degenerative states may be connected with this same pattern. Deficient diet and other factors leading to cell changes could also conceivably lower our resistance to bacterial and virus diseases, and so derange our enzyme and hormone production that even malignant tumors of any body tissue might be produced or enhanced by it.

The failure of the liver and other glands to withstand anoxia as shown above fits the recent surge of work with cortisone and ACTH. Most of the diseases successfully linked with that new work and

many others, as coronary, et cetera, will, I feel, fit our thesis.

The adaptation theory of Selye also may only, or more easily, occur if the endocrines have been disturbed in function or structure by depletions as mentioned above. The liver being the factory for enzymes, protein, and other vital materials, is affected early, but has tremendous reserve and recuperative powers. It certainly takes a terrific beating from alcohol and other toxins in modern life, meanwhile being deprived of good protein in adequate amounts, iron and other minerals as well as various vitamins and other necessities. Even too much fat alone could so fill a cell, especially if there are inadequate lipotropic hormones available, that the cells function could be handicapped by mechanical means alone, just as a modern factory couldn't be 100 per cent efficient if it were cluttered and crowded.

The arthritides, rheumatic fever, acute glomerular nephritis, and many other diseases may be conditioned by dietary deficiency by direct effect on the joint or other tissues, and indirectly by its effect on the endocrines and other organs. The possibility that these diseases are akin to cirrhosis, with first a depletion of the cells, and then some arthro toxin, renal toxic, et cetera, instead of a hepato toxin, seems probable, especially a strepto toxin, in rheumatic fever, for instance, plus the associated disturbance of the body generally, especially the liver and endocrines.

Thyrotoxicosis may be due to dietary deficiency affecting both the pituitary and thyroid glands, especially, plus specific lack of iodine and added goitrogenic substances; similarly, diabetes may be due to dietary deficiency affecting primarily the pituitary and pancreas.

Pernicious anemia and many of our degenerative brain and cord diseases could have deficiency as their origin. Acute coronary heart disease seems simple when we realize how soon heart and coronary cells are impaired by anoxia, and that the available oxygen may not be as readily picked up by the affected cells. Tobacco, by vasospasm, may also contribute in further reducing the O_2 available. The damaged intima seems an ideal place for thrombosis to begin. This anoxia is induced by so much demand for O_2 that the coronary vessel, if its caliber is reduced, cannot allow enough blood to the overworked muscle. Increased work increases the need for O_2, and when a certain point is reached, a deficit of O_2 must occur and become increasingly great. The fact that an anoxic heart muscle does not pick up the available O_2 as well as normal muscle aggravates this and we have a spiralling action which causes many acute coronaries. The shock incident to the pain aggravates the anoxia by the ensuing poor circulation. The work of the heart is reduced, but so is the available O_2. I saw a man, unconscious with an acute coronary, relieved by morphine within minutes of the onset, who never developed thrombosis. He demanded to leave the hospital and apparently escaped unscathed.

The above discussed diseases, and many others, may be due to conditioning of certain cells of the body by deficiency states which seem to be akin to anoxia. They are further insulted in their weakened state by toxins, endogenous, metabolic, or exogenous, such as metals, bacterial, fungal, viral, rickettsial, yeast, mold, or any other toxic substance. Even our own hormones may be toxic.

The deficiency may be in protein, minerals, vitamins, or specific substances known, like lipotropic hormones, or the extrinsic E.M. factor, Cytochrome C, or still unknown essential materials.

There may be faulty absorption, digestion, or transportation of the foods which would result in a deficiency with an otherwise adequate diet. Anything interfering with blood formation, circulation, local or general, oxidation, or its availability to the tissues (as Cytochrome C lack in Wilson's disease), or CO poisoning, or prussic acid, et cetera, or mechanical factors impeding cell function, i.e., sclerosed or spastic vessels, hemorrhagic states including acute and chronic blood loss, could produce a deficiency; obesity might possibly induce the same effect by extra- or intra-cellular crowding, as in the fatty liver.

These above-listed factors may be minimal, or they may be severe enough to threaten life or cause death.

Recovery may be apparently 100 per cent complete from such severe short anoxic states as those in survivors of drowning or lightning.

The added insult to depleted cells of toxins, exogenous or endogenous or hormones, may cause fatal, severe, or minimal damage to the tissues, often on a selective basis. These cells may be more susceptible to bacteria, virus or other invaders, such as pneumonia, the common cold, or polio, et cetera. Malignant degeneration might also occur due to these factors, or at least be precipitated earlier than it would otherwise be.

One difference between the cells of cancer and normal cells is that the latter live in physiological restraint, like a motor with a governor. A cancer cell might only be a formerly normal cell weakened by some deficiency of itself and/or some of the organs which produce regulating hormones or enzymes, and which is further insulted by some carcinogen such as tar, et cetera. A severe depletion might require less carcinogen and vice versa. A cell so goaded might break the physiological barriers that restrain it and revert toward some primitive cell ancestor with the basic urge to grow and reproduce itself uppermost in its life. The repeated bombardment of the estrogens, for instance, might upset the balance. They are growth hormones, not true sex hormones. The further the cells regress, the higher the grade of malignancy might be. The late Dr. Goodell,[11] of McGill University, reported cases at the Ontario Medical Association meeting in 1947 that he felt were due to excessive administration of estrogen. The fact that the liver detoxifies coal tar and other toxins has been shown by Lazerow.[17] That estrogens are also rendered innocuous in the liver is generally conceded. These facts may, when the liver is depleted, cause a piling up of estrogen or other carcinogen in the organism by its failure to detoxify them. A depleted cell in a depleted organism may require lesser amounts of carcinogens to become malignant. The greater frequency of malignancy in the older age group may be due to poorer nutrition because of poor circulation through sclerosed vessels, which produces tissue anoxia, plus the fact that they require less, eat less, and digest less with advancing years.

Is cancer inherited? I feel that cancer, like obesity, may not be in itself inherited, but may be engendered by acquired faulty familial eating habits from which once a pattern is established, there is little tendency to deviate. Certain familial strains may require less depletion or carcinogen, as in Dr. Clarence Cook Littles' strains of mice.

Having been in medical school in 1917, I have seen medical trends for nearly a third of a century, and I have felt for some time that certain diseases were definitely on the increase. I would list as among these occurring at an earlier age, and as being fatal earlier than when I was a boy, hypertensive diseases, malignancy, possibly polio, and also many others.

The only explanation I can find for this is our changing habits of living, especially among city dwellers. Our caloric needs have dropped percipitously from those of our fathers. I believe that men like Franklin, Washington, Lincoln, Osler, and others, burned and hence consumed, huge quantities of calories, which helped develop sound minds and bodies, and that from such as they have come some of our rarest heritages. Living in heated houses, with indoor plumbing, is a far cry from our youth. The healthy effect of exercise in the open air has been largely forgotten or ignored. Even cars are heated, and used on the least provocation. From the lack of exercise, and lack of radiation, we need so few calories that if they are not chosen wisely, we are certain to have deficiencies. The average American is very unwise in the choice of foods. We consume huge amounts of highly refined foods such as sugars, also our tastes run to popcorn, peanuts, potato chips, pretzels, candy of all sorts, eaten by the ton, and such food-sparing beverages as coke, beer, wine, and spirits. These facts speak for themselves. Few of us are active enough to create such a need for food that we can afford to eat and drink such trash. A figure-conscious female will often eat less than 1,000 calories a day. Often half of this is in the above list. Hence their diet will be grossly deficient in protein, minerals and vitamins. All their body organs must suffer, especially the liver. They are no better off than the Bantus (white Bantus, as it were). If these livers were biopsied, I'm sure they would reveal what the Gillmans[10] found in the natives. Wealthy clubmen, eating large steaks and plenty of sea food, rarely are cirrhotic, even with huge alcohol consumption.

I feel very strongly that these dietary deficiencies may condition our tissues for subsequent ravages of toxins, such as dietary deficiency plus alcohol leading to cirrhosis, and dietary deficiency plus streptococcal toxins leading to atropic arthritis or rheumatic fever. The deficiency must be generalized in its effect, and the effect on the liver and the endocrines, et cetera, may have an additional effect on the joint, and other areas bearing the brunt of the particular disease. The recent work with ACTH and cortisone exemplifies this. In rheumatic fever, for instance, the joint tissues, the subcutaneous nodes, the Aschoff bodies, and other areas involved, may be the spots that are conditioned by the deficiency, and then later ravaged by the toxin. This is demonstrated by the nodes described by Freund et al[9] in rheumatoid arthritis.

That carcinoma can occur in similarly conditioned tissues which are later exposed to adequate amounts of carcinogens, seems tenable. Thus stomach tissue, rendered deficient and then exposed to irritants—thermal, chemical, and hormonal—would be more susceptible to malignancy when the liver and endocrines have also been weakened by dietary deficiencies. Similarly, smoking could lead to lung and oral cancer in depleted persons.

Leukemias, acute and chronic, lymphomas, et cetera, may be similarly caused, and may be regressions of bone marrow cells, the acute being like grades 3 and 4 cancer, and the chronic like grades 1 and 2.

The very important work done by Dr. Greene of Yale U. on the transplant of malignant cells into the pig's eye, agrees with my theory. The fact that a nondescript mass of malignant cells may grow in the eye and recover enough of their previous characteristics to be identifiable as thyroid, pancreas, et cetera, is, I believe, a reversal of carcinomatous change, probably induced by improved conditions in the pig's eye. Chemicals, enzymes, hormones, et cetera, seem to be trying to reestablish physiologically normal cells. What these substances are should be identifiable by our brilliant chemists and physiologists. The fact that certain non-malignant tumors and fetal tissue will grow in the pig's eye, and adult normal tissue will not, is further evidence that cancer cells are only adult cells reverted toward a primitive cell ancestor, with fetal tissue ranging somewhere in between.

The recent work on the effect of tapeworm exchanged between cat and rat finally embedding in the rat liver, reported by Dr. W. F. Dunning,[7] shows that if the liver is only minimally affected with one or two larvae, the rat survives as long as two years. If 100 larvae enter, the rat dies before carcinoma can develop. If an intermediate number of parasites enter the liver, cancer will kill the rat in eight to twenty months. If the lesions are surgically removed from the liver, washed and injected into the peritoneal cavity, cancer develops in the adjacent organs. This only proves that this is a potent carcinogen and that liver destruction may augment it. The parasites affect only certain strains of rats but all cats seem to be able to help carry on the cycle.

Chronic infection of the cervix and prostate in depleted people, may leave these glands susceptible to malignant degeneration. There may be carcinogenic action in some of the bacterial toxins to which they are constantly exposed. Hormone bombardment probably also plays a part.

What can we do to turn the tide?

Everyone must be alerted to the dangers of these trends. We must burn up more energy so that we can consume more food without becoming obese. We must choose our foods more wisely. Dietary dubs must be corrected, and food faddists converted to saner habits. This should be on a national basis.

What we need is not the fair deal nor the square deal, but the old deal and the square meal that goes with it. We shouldn't ask for security from the cradle to the grave (or from the womb to the tomb), as Dr. Andy Hall of Mt. Vernon, Illinois, says), as much as we should ask for opportunity from the cradle to the grave. This could increase our span. That our increasing longevity is based more on success in treatment of infections, contagions, and in infant welfare, than on conquest of the degenerative diseases, is well known to all medics. We are being killed with kindness: we are pampered too much. Work should be a privilege not to be lightly discarded. Workers should be retired on their physical, not calendar age. Many a farmer in his seventies is physically healthier than a city dweller of fifty. This is often illustrated by the untimely end of a formerly active man, without any hobby, who retires to inactivity. Men who eat well and who have no chronic disease will not be injured by hard labor; often the reverse is true. It isn't that golf is injurious to a businessman, but it is physical degeneration plus overexertion that causes so many untimely ends.

The nerve tension that is developed in our modern city dweller, with poor dietary habits and sedentary living, is aggravated by our high-geared existence, which engenders nervous indigestion, depriving us of still more of the good in our diet. The strength of the Russian people and other northern races, may come largely by accident of geography, in which the climate causes the need for greater consumption of food.

If we can learn to so live that we work, play, and eat better, we will approach the Utopia of a "sound mind in a sound body," where all worldly differences could disappear, and "nation would not lift up sword against nation, neither would they learn war any more," but man's longevity could be spared for service to God and mankind, which is the divine plan of the Great Physician.

Treatment

Firstly, a diet adequate in protein, especially lean meat, fish, poultry, cheese, milk and eggs, green vegetables and fresh fruit. Nothing further need be added unless the need for calories warrants additions without producing obesity. In cases of obesity, weight reduction is instituted without reducing the protein intake.

Secondly, increase the need for food by increasing caloric requirement by the use of exercise and exposure to fresh cold air, thereby increasing radiation by sleeping in cool bedrooms, driving with car ventilators open, and outdoor exercise daily. I prescribe two hours walking outdoors or its eqivalent.

Thirdly, so living that we have peace in our souls and are the masters of our destinies. Religion freely professed and practiced is the best preventive of nerve tension I know of. A glass of spirits at the end of the working day and rest, relaxation and peace before and during meals will help prevent nervous indigestion. Adequate rest and sleep and more vacations entailing outdoor exercise should be provided.

Fourthly, avoidance of known carcinogens as the estrogens and allied substances, tars, chronic infections, chronic irritation, mechanical, thermal or radiant, especially in depleted persons, or persons with good soil for malignancy, such as proven by family history.

Fifthly, use of any measures such as surgery or antagonistic hormones to remove or lessen the malignant activity.

These measures apply by-and-large to other degenerative diseases; also other specific measures we now know in diabetes, hypertensive cardiovascular renal disease, and many others should be used.

Sixthly, crude liver intramuscularly may supply some of the elements missing, so I give it too. I have cases under observation now who seem to bear this out, but it is too early to report, although one person with cancer of the prostate, seen and concurred in diagnosis by three competent urologists and declared inoperable, is well after four years, with no obstruction, and has had no operation, and is in excellent health.

Also, a woman with inoperable cancer of the breast, bedridden, and in great pain from bony metastases seven months ago, now walks a mile to my office twice a week. She feels fine, is free from pain, and is optimistic about the future.

Synopsis

Many clinicians and laboratory workers have shown that acute anoxia of severe or fatal degree produces morphological changes in body cells, especially in the parenchymal organs. Similar changes have been shown in deficiency states both by biopsy and autopsy.

Dietary deficiency plus alcohol or other hepatotoxin can produce cirrhosis.

Other clinical states including malignancy can be induced in depleted tissues which are insulted by carcinogens. Depleted tissues might require less carcinogen to produce cancer, and huge amounts of carcinogen might require only minimal depletion.

The depletion of the liver and the endocrines may augment this by failure to detoxify carcinogens and/or elaborate protective substances which might vitiate the process.

That this could occur in diabetes, cardiovascular renal disease and many other states seems self-evident. Further work is needed to elaborate and evaluate this.

Conclusion

Anoxia and dietary deficiencies may lead to the same end. The importance of O_2 lack to our whole being may be the answer to many deficiency diseases, and carcinoma itself may be only an escape of some of our own body cells from physiological restraint in response to stimulation of carcinogens on depleted tissues. The liver and the endocrines, being similarly depleted, may augment this by failure to detoxify carcinogens and/or elaborate protective substances which might have held the goaded cell in its physiological equilibrium.

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Can Cancer Be an Inherited Family Disease?

By Henry J. VandenBerg, M.D.
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STATISTICIANS insist that the occurrence of cancer families is purely coincidental, that multiple instances in a family are no more frequent than the law of probability permits. They arrive at figures considered for the whole population of human beings. One cannot help but wonder how such small percentages of the whole can be reliable; moreover, their premise is based on vital statistics obtained for the most part from clinical evidence which is conceded to be grossly inadequate and erroneous.

The story of *bilateral* cancer of the breast in a mother and two daughters and recently a granddaughter (third generation, a daughter of one of the two daughters with breast cancer) is reported.

Case 1.—The mother, not our patient, at the age of forty-five had a tumor of the left breast for which she had a radical resection. (Seven years later she was operated upon for tumor of the uterus, presumably a fibroid.) Then two years later, or nine years after the left breast operation, she had a "lump in the right breast and armpit." For this no operation was done. She died two and one-half years later and it was thought that the cancerous condition had been spread to the brain.

Case 2.—The first daughter, at the age of twenty-six, came to our attention in October, 1916, with a lump in the *left breast* first noticed two months before. It was located at 3 o'clock, the size of a hickory nut, rather sharply defined and with no skin signs. It proved to be a medullary carcinoma, with no extension to the lymph nodes.

(In 1931, fifteen years after the breast surgery, she had a hysterectomy for a trouble-making fibroid.)

The last check-up examination was eighteen years after the breast surgery. She had no complaints. The clinical examination was negative.

A year and eight months after the last check-up examination, then twenty years after the left breast surgery, she reported a small lump in the *right breast* picked up three weeks before. It was located at 2 o'clock. It lay rather deep, no skin signs and again about the size of a jumbo hickory nut but not sharply circumscribed. General health was good. The clinical examination was negative. X-ray studies of the chest and skeletal system were negative. This lump proved to be a scirrhous carcinoma; again no metastasis to the lmyph nodes was reported.

Patient now lived out of town and did not report until fourteen months later with a story of severe backache low down in the lumbar region. X-ray studies disclosed metastatic lesions in the third and fourth cervical vertebrae and in the bony structures of the pelvis. X-ray of the chest was negative. This was, of course, the beginning of the end.

Case 3.—The second daughter, aged thirty-nine, came in October, 1938, to report the discovery of a bunch in the *left breast* on which she wanted an opinion. She was cancer conscious because her sister had recently died of cancer of the breast. (Take note of her being cancer conscious in view of subsequent events.) The bunch in the breast was, as it was in the case of her sister, at 3 o'clock, the size of a hazel nut. Frozen section examination proved it to be malignant. A radical operation was done; axillary nodes grossly not malignant. Laboratory report, "Sections show carcinoma partly medullary and partly scirrhous infiltrating the fat tissue. No lymph node extension."

(In April, 1942, three years following the breast surgery, she was operated upon for a large fibroid uterus.)

In June, 1948, nine years after the first breast operation, she came in to report that six months before she had noticed a bunch in the *right breast.* She had not reported for follow-up examination for six years because of negligence, and now she had procrastinated, for a period of six months, to report a tumor in the opposite breast. Such behavior in an educated person is not understandable in view of what had gone before. Examination disclosed a bunch in the *right breast* at 2 o'clock, the identical site of the second tumor in the case of her sister. It was a bit irregular, the size of a split golf ball, with one palpable axillary node. No other objective clinical evidence of extension. X-ray studies of the chest and osseous system were negative for evidence of metastasis. A radical operation was carried out. Pathological diagnosis: adenocarcinoma of breast; metastatic carcinoma of axillary nodes.

The report at eleven months following operation was that the appetite was not up to normal, pelvic discomfort and aching in the neck and coughed some. The examination at this time revealed definite changes in the right chest, diminished breath sounds, dullness. X-ray study reported "fluid in the pleural cavity with increase in hilar areas that suggest metastasis to the lungs. Multiple lytic areas in the region of the ischial tuberosity on the left side which are suggestive of metastasis."

Three months later in addition to symptoms and signs of chest involvement the right lobe of the liver was found to be enlarged. She was on a downward course. She was given Testosterone resulting in some subjective improvement but objectively the changes were progressive. She expired on October 24, 1949, sixteen months after discovery of the tumor.

Case 4.—Recently a daughter of the first daughter, aged thirty-six, had a breast carcinoma, also of the *left breast,* again at 3 o'clock, with axillary metastasis. (This granddaughter has also a fibroid uterus.)

Discussion

Here we have a mother and 2 daughters with *bilateral* carcinoma of the breast. In each instance the sequence was identical, left breast-right breast; left breast-right breast; left breast-right breast; and in the daughters *the exact sites also were identical.* The granddaughter, aged thirty-six, had a tumor, again in the *left breast,* also at 3 o'clock.

The mother and two daughters had a fibroid uterus, and the granddaughter has a fibroid uterus.

The only family history obtainable is that the mother's mother and two of her brothers were said to have had cancer; more than this is not known.

Such data is, of course, not reliable. Few know what their grandparents or other remote ancestors died of. While there is no support in the family history obtainable to make a case for inheritance, there might be, in fact, abundant evidence.

The most striking and convincing evidence of heredity playing a part in the occurrence of cancer is a study of identical twins. Macklin found that when one uniovular twin has a tumor, the other will have one in 60.4 per cent of cases, and they usually are similar and in the same location.

A well-known example of a cancer family is the family G of Warthin, which starts with a father of a family who died of gastrointestinal cancer. Of the next generation six of ten members over twenty-five died of cancer. Of the third generation twenty-seven out of sixty-four members over twenty-five developed cancer. The location of these cancers were not varied, as occurs in the general population, but they were almost completely confined to the gastrointestinal tract and uterus, which brings out the significance of that which is well understood today, namely, organ or system susceptibility as well as general susceptibility. Warthin, in his studies, conclude that a definite and marked susceptibility to cancer exists in certain families and family generations.

The retinoblastoma of young children as it occurred in families in the earlier days was thought to be a sporadic occurrence. Now it is considered definitely as hereditary.

The neurofibroma is another neoplasm that is regarded as hereditary.

There is a great deal of evidence that carcinoma of the breast, cervix and rectum carry inheritance factors.

Polyposis of the large intestine is known to be often hereditary and to have a definite tendency to become malignant.

The writer recently examined a woman patient who had a blue-black mole on the forearm. When told of its potentiality, she said, "My sister who is here with me has one and my mother also, and all in the identical location." It is impossible to believe that such instances do not represent some hereditary factor in the germplasm which acted as a determiner for these lesions.

In some individuals there appears to be a marked predisposition to cancer. A cure of a neoplasm in one organ may years afterward be followed by a primary malignant growth in some other organ. Thirteen years ago the writer operated upon a patient, aged fifty-one, for a large mass in the pelvis that proved to be an adenocarcinoma of the uterus and a papillary adenocarcinoma of the ovary. Surgical cleaning out of the pelvis followed by x-ray therapy has resulted in a now thirteen-year "cure." Ten years after the pelvic surgery a lump was discovered in the right breast that proved to be malignant. She had then three definite independent primary malignant tumors, and she had this family history. The mother, two sisters and a brother had cancer.

Whenever a tumor in the opposite breast becomes manifest, the question of it being secondary to the cancer of the other breast or whether it is a primary growth naturally comes to mind. Recurrences after fifteen, twenty or twenty-five years are known, which brings up the question of cancer inactivation or inhibition that in some patients holds the growth in check, and then for some reason it is lost, allowing the cells to grow. Long periods of inactivity may occur even in such malignant growths as the melanomas. Theoretically involvement of the opposite breast, in the cases here presented, could have been secondary together with those of the more remote parts such as finally appeared in the skeletal system, chest and liver. It is not possible to be certain in any case, yet if the interval is of well over five years duration, especially so, if there is no evidence of secondaries, it is generally held that one is dealing with another primary.

It is not too unusual for a second primary to develop in the opposite breast. Foote and Stewart state that "the most common pre-cancerous lesion of the left breast is a cancer of the right breast and vice versa."

In all four cases reported growth had started

under the age of forty-five; the mother was forty-five when the growth was first discovered and, in all likelihood, it had been there for some time; the other ages were twenty-six, thirty-nine and thirty-six—in other words, three under forty. Breast cancer under forty is considered to be an expression of intensive estrogenic activity and high susceptibility of breast tissue involvement. There is said to be relationship between intensive estrogenic activity and pelvic pathology, benign or malignant. All four had a fibroid uterus.

The mother and two daughters had five-year "cures." More exactly, nine years each for the mother and one daughter, and twenty years for the other daughter. After the appearance of the opposite breast involvement in all three cases, growth was rapid and extensive. The mother was thought to have extension to the brain.

The first daughter succumbed sixteen months after discovery of involvement of the second breast; eighteen months for the second daughter; two and one-half years for the mother.

The two daughters and granddaughter were breast fed, most likely the mother also. This brings up the question of the milk factor.

Summary

Three definite cases of *bilateral* breast cancer in a mother and two daughters and now cancer of the breast in the third generation is reported.

In each instance the sequence was identical, left breast-right breast; left breast-right breast; left breast-right breast. In the daughters *the exact sites also were identical,* 2 o'clock-3 o'clock; 2 o'clock-3 o'clock. (The sequence might have been the same in the mother.) The granddaughter, aged thirty-six, had a tumor, again in the left breast, also at 2 o'clock.

The occurrence of primary tumors not only in the same tissue or organs but in the same sequence and exact sites as did occur in the cases reported coincides with the behavior of tumors in identical twins. Tumors in identical twins offer the most convincing evidence we have of heredity playing a part in the appearance of cancer.

If tumors are of genetic origin in twins, they may be of the same origin in others.

The mother and two daughters had a fibroid uterus, and the granddaughter has a fibroid uterus.

The cases reported give evidence in support of inherited family disease but are not proof. Nevertheless, it is such experiences that keep bringing to one's attention the probable genetic origin of cancer.

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The American people would not now accept socialism as a substitute for our American democracy. However, there still is much confusion in the minds of the public and of many physicians as to the importance of the so-called fringe bills. For the past fifteen years the American people have been conditioned to the gradual growth of welfare projects not only in medicine but in other fields of attempted economic planning, which historically in other nations have always ended in economic dictatorship. Economic planning and welfare projects have been promoted as devious alternative measures in preference to meeting economic and social difficulties on the basis of individual responsibility and incentive of each citizen.—Address by E. E. Irons, AMA President.

Rationale of Therapy of Blood Diseases

By William Appel, M.D.
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IT IS BASIC to have a knowledge of the vascular factors involved in hemostasis and of the mechanism of blood coagulation in order to intelligently treat hemorrhagic diseases. Unfortunately at present, however, we know little of the vascular factors involved in the control of bleeding.* This is largely because it is difficult to study capillary wall experimentally.** With regard to the mechanism of blood coagulation, however, there is considerable knowledge.† The almost universally accepted view, at present, of the mechanism of blood coagulation is depicted below:

(A) Prothrombin + thromboplastin + calcium++ + AC globulin——→ thrombin
(B) Thrombin + fibrinogen ———→ fibrin

Let us briefly consider the components of the above reactions and observe how the commonly used anticoagulant drugs (dicumarol and heparin) exert their effect in the above reactions in the control of thromboembolic disease.

1. Prothrombin is a protein made in the liver and fat-soluble vitamin K is essential for its synthesis.

2. Thromboplastin§, present in all tissues, lung and brain being especially rich sources, is also formed as a result of disintegration of blood platelets.

3. Calcium ions are always present in normal blood.

4. Ac globulin‡ is a protein and is essential for reaction A to occur.

5. Thrombin is formed as a result of reaction A and is normally antagonized by an antithrombin component of the serum albumin.

6. Fibrinogen is a protein made in the liver and is present in normal blood.

Dicumarol and vitamin K are physiologically antagonistic substances. Vitamin K is essential for the production of prothrombin, and since dicumarol inhibits the action of vitamin K, when sufficient quantities of dicumarol are given, prothrombin is not formed and blood coagulation is retarded or does not occur. Vitamin K is normally ingested in food, and is also normally formed by intestinal bacteria. It is imperative, however, that bile be present in the bowel for vitamin K to be absorbed from the intestine.

When excessive amounts of dicumarol have been administered to a patient, large quantities of vitamin K therapeutically are indicated; but because it often takes several hours for the vitamin K to counteract the effect of the dicumarol, transfusion with blood†† or plasma to supply prothrombin should be given immediately as emergency treatment, and the vitamin K in addition.

Heparin,° made in the liver, is an antithrombin substance, but when mixed with serum or plasma is more antithrombic than heparin or serum alone. It is believed that heparin combines with an antithrombin component of the serum to form a more active antithrombin substance, thus neutralizing thrombin after it is produced as a result of reaction A. In the presence of plasma, heparin appears to have also an antithrombin and antithromboplastin effect.

It is basic also to have a knowledge of the factors involved in erythrocyte formation, of their destruction and separation from the blood in order to intelligently treat anemias. Thus one should remember, that there are many causes of anemia aside from disturbances in the maturation of the red blood cell. These disturbances range from and include hereditary traits (as the sickling trait in ten to twelve per cent of negro people); hemorrhage; replacement of bone marrow which has to do with production of red blood cells by fibrous tissue, cartilage, bone or neoplastic metastatic tissue; the effect of toxins, whether exogenous or endogenous (chemical or bacterial), on bone

*Except for some knowledge of the relationship of the spleen to "idiopathic thrombocytopenic purpura" and of allergic causes for some forms of purpura, little is known regarding the causes of purpura.

**There is evidence that vitamin P has some antihemorrhagic quality in certain diseases associated with increased capillary fragility. Rutin, prepared from green buckwheat, has been used as a source of this antihemorrhagic factor.

†Blood coagulation phylogenetically is a third line of defense in the control of bleeding, the first and second lines of defense being vascular contraction and agglutination of cells.

§In Quick's prothrombin test thromboplastin is obtained from suspension of rabbit brain. There are said to be two classes of thromboplastic substances: (a) cephalin and lecithin, (b) lipoproteins.

‡Ac globulin has this clinical significance. When there is a prolonged prothrombin time and no clinical evidence (cirrhosis, obstructive jaundice, et cetera) to suggest prothrombin deficiency, the possibility of Ac globulin deficiency needs to be considered.

††The blood or plasma should be fresh because there is some loss of prothrombin on standing. Whole blood is better than plasma.

°Toluidine blue and protamine are said to have an antiheparin effect. Protamine is a simple protein with basic properties, combines with heparin, the resulting compound being free from anticoagulant action.

marrow as to hinder erythropoiesis; to the loss by the spleen of its "power to distinguish" normal from damaged or old red blood cells, with resultant hypersplenism.* Disturbances in the normal maturation of the red blood cell are of course of vast importance in causing anemia and need to be understood in order to treat intelligently anemia resulting from these disturbances. Below diagrammatically are shown various stages in the development of the red blood cell. The stages at which our treatments exert their effect in normal erythrocyte maturation are shown in Figure 1.

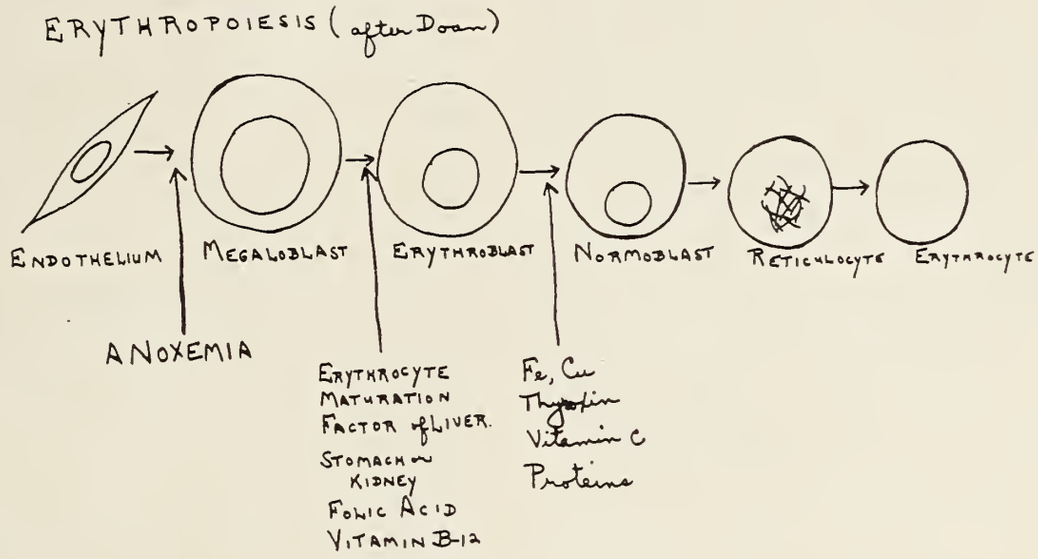

Fig. 1.

Liver extract contains an erythrocyte maturation factor essential at the stage indicated in Figure 1, i.e., to enable the megaloblast to mature to erythroblast. It is not effective in any other stage and apparently is unnecessary therapy when maturation has proceeded to the erythroblast stage. It is now generally believed that at least five factors are involved in the production and use of substances necessary for the prevention of pernicious anemia—the extrinsic factor is ingested in food, the intrinsic factor contained in and secreted into the gastric juice, the interaction of these substances in the gastrointestinal tract to produce an antianemic substance absorbed by the bowel, the storage and perhaps further modification by the liver of this antianemic substance, and the release by the liver of this substance to hemopoietic tissues and its utilization by these tissues in producing blood.**

Folic acid (pteroyl glutamic acid) contains the anti-anemic principle but lacks some substance essential to prevent or control nervous system findings, et cetera, other than anemia which are often also an integral part of the pathology of pernicious anemia.

Vitamin B_{12} (a cobalt-containing substance) contains the erythrocyte maturation factor but apparently in addition can prevent and control the nervous system findings. etc., in pernicious anemia.

Iron exerts its effect in the phase of maturation of the erythroblast to normoblast. It is of no value in other phases. Iron is probably acted on in the stomach, a chloride salt being formed, and is absorbed mainly in the upper small bowel. It would appear unwise therefore to use enteric coated iron tablets as iron therapy. The daily requirement of iron is about 2 mg. but because normally only about 10 per cent of iron ingested is absorbed about 20 mg. is the recommended daily amount—though in the presence of iron deficiency anemia the rate of absorption may increase considerably—even, occasionally, to 40 or 50 per cent. In the presence of infection the tissues seem to hold iron and though adequate quantities are ingested, the red blood cells do not seem to be able to obtain the iron from the tissues. Giving large quantities of iron orally does not remedy this condition. The obvious treatment is to eradicate the infection if possible. Small blood transfusions

*Doan and Damashek have postulated different views as to the mechanism of hypersplenism. According to Doan's view (sequestration theory) there is phagocytosis of one or more cellular elements of the blood by the spleen—phagocytosis of large numbers of red blood cells resulting in hemolytic anemia, of leukocytes in neutropenia, of platelets in idiopathic purpura, of all three of the above in panhematopenia. Damashek's view is that the spleen normally exerts a hormonal inhibitory action on bone marrow blood formation, and that if this inhibitory action is exaggerated, depression of one or more of the cellular elements and hypersplenism can occur.

**The anemia resulting from failure by the hemopoietic tissues to properly utilize this anti-anemic substance has been called achrestic anemia.

however are also of value. Recently the intravenous use of iron has been advocated when it is difficult to raise hemoglobin values by oral iron therapy, and though intravenous iron is often of value in individuals who cannot tolerate oral iron, there is a possibility that intravenous iron will be used more or less indiscriminately as is liver extract. This is to be deprecated because little is known of the metabolism of iron,† there have been deaths reported due to iron poisoning (ingestion), and there is the possibility of hemosiderosis.

In the presence of infection the administration of cobalt appears to help the tissues release some iron to the red blood cells, but because almost nothing is known of cobalt metabolism, the general use of cobalt for this purpose is unwise. Cobalt exerts its effect in the stage depicted as does thyroxin in some anemias associated with hypothyroidism.

Since adequate quantities of copper are present in the usual diet, there is no need for using copper as anti-anemic therapy except perhaps in rare instances in young infants.

Vitamin C§ deficiency is said by some people to be a factor in causing some anemia, adequate quantities apparently being required for normal functioning of erythropoietic tissue.

The use of preparations containing multiple anti-anemic substances designed to aid in maturation of the red blood cell at its various stages is wasteful therapy unless there is evidence of multiple deficiencies in maturation factors. It is somewhat like giving a blood transfusion when there is need for only additional sodium chloride in the blood stream. Besides the waste, however, it is not rational therapy. It frequently lulls the physician into a false sense of security so that he does not search for the exact cause of the anemia, but prescribes medication with the hope that it will remedy the anemia though he does not know the cause.

Based on the as yet unproven concept that leukemia is a form of blood cancer, though it is not proven, in recent years some newer drugs have been introduced as therapeutic agents to destroy leukemic tissue and prevent or decrease the production of leukemic cells. These agents, however, do not act only on the abnormality in the cell which renders it malignant or leukemic but produce changes, too, in normal cells. They act as general cell poisons (urcthane, nitrogen mustards, radioactive phosphorus), or antagonists to substances essential to cell growth (aminopterin and other folic acid antagonists). One should be cognizant, however, that these forms of therapy have only an empirical basis for their use because little is known of the etiology of blood cancer, if leukemia is a malignant disease, and because little is known as to why apparently excessive numbers of white blood cells occur in leukemias. While these agents are not curative and have definite limitations, they often help in producing remissions, temporary clinical improvement, and have helped at times to prolong life.

Though all forms of therapy in acute leukemia are discouraging, folic acid antagonists appear to be of most value, should be started as soon as the diagnosis is made and may produce remissions of several months' duration. X-ray, P_{32}, nitrogen mustards do not produce satisfactory remissions in acute leukemia. The folic acid antagonists presumably interfere with the synthesis of nucleic acids which are essential for cell growth and multiplication, but it is not known whether the effect of the folic acid antagonists is due only to the anti-folic acid action.

In chronic myelogenous leukemia, x-ray, P_{32}, urethane and nitrogen mustard (HN_2) are of value in producing temporary palliative results—irradiation of the spleen being about the simplest and most practical therapy, though P_{32}, HN_2 and urethane may be used. Folic acid antagonists are of little value here. It is rare to have one substance succeed in chronic myelogenous leukemia when another fails. Radioactive P (P_{32}) acts by irradiating tissues through the production of beta rays and possibly has some selective localization in leukemic tissue. HN_2 damages and interferes with multiplication of susceptible cells, and its effect occurs more rapidly but is of shorter duration than x-ray. How urethane interferes with cell growth is not known though it is presumably injurious to proliferating tissue.

In chronic lymphatic leukemia, treatment with any of the effective agents should be given conservatively, because while small doses many produce partial improvement, too large doses may

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†If large quantities of iron are ingested, only small quantities can be recovered from urine and feces. There is some recent evidence that appreciable iron is lost via skin.

§In scurvy, however, the essential pathological change is weakening of the endothelial wall of the capillaries, the intercellular substance being reduced in amount.

Experiences with Cervical Arteriovenous Fistulas in Attempts to Increase the Blood Supply to the Brain

By J. M. Hammer, M.D., H. S. Heersma, M.D., W. P. Marshall, M.D., W. E. Patow, M.D., and D. G. May, M.D.

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NUMEROUS DISEASE states in which the blood supply to the brain is impaired are commonly encountered in everyday practice. These include birth injuries, mental retardation, and convulsive states in the younger age groups and post-traumatic and cerebrovascular accident residuals in the older age groups. Pathologically all of these states are characterized by a scarring or gliosis which interferes with the blood supply to the brain tissue. Because such lesions have been rather refractory to all forms of treatment, a surgical attempt has been made to increase the blood supply to the brain itself by means of a cervical arteriovenous fistula between the common carotid artery and the internal jugular vein.

Anatomically it is known that the arteries and veins anastomose freely within the brain: and it has been shown by injection studies that, in general, the superior sagittal sinus drains the blood from the cortex and eventually empties into the right internal jugular vein, while the inferior sagittal sinus receives blood from the center of the brain and eventually drains into the left internal jugular vein. Both of these systems anastomose freely.

Injury to the brain by trauma, anoxia, hemorrhage, and vascular occlusion are all characterized pathologically by a decreased blood flow and a glial proliferation, which is manifest clinically by mental deficiency, convulsive states, and motor-sensory impairment.

Neurones in a scarred area of the brain may be completely destroyed, may gradually die, or may continue to live in an obviously abnormal state due to the poor blood supply. They never multiply or hypertrophy. The existence of viable but nonfunctioning neurones is seen clinically in the cerebrovascular accident. Widespread cerebral involvement may occur with the acute episode, yet function returns to the affected parts after a period of weeks or months.

Vascular surgeons have been able to increase the blood supply to an area by reversing the blood flow through the veins of the affected part. This procedure became feasible after the physiology of the arteriovenous fistula was understood.

It had been noted for a long time that an arteriovenous fistula in an extremity causes an increase in its size and temperature and that the increased venous pressure places an additional load upon the heart until the patient either dies of heart failure or the fistula is corrected surgically.

Bernheim[3,4] reported a case in which he reversed the circulation in all four extremities and on which he had an eighteen-year follow-up report. It should be noted that he ligated the vein proximal to these fistulas.

Jordan[5] published his results on nine cases in which he anastomosed the femoral artery and vein in an attempt to increase the blood supply to an extremity in which the arteries were obliterated.

Beck[1] reports that he was able to reverse the blood flow through the heart veins by anastomosing the systemic arteries to the coronary sinus.

Sciaroni[7] reversed the circulation in the brains of humans by anastomosing the proximal severed common carotid to the distal internal jugular vein, in which all communicating branches to the base of the skull had been eliminated, and by anastomosing the distal carotid end-to-end with the proximal end of the internal jugular vein. He referred to this procedure as a "double arteriovenous anastomosis."

In their respective series of eleven and 125 cases Beck and McKhann[2,6] state that they obtained improvement in 35 per cent of the cases by using a side-to-side anastomosis between the common carotid artery and the internal jugular vein, in which all feeder branches had been ligated up to the base of the skull. The jugular vein was divided between the anastomosis and the heart.

In work on monkeys Webster and Gurdjian[8] claimed that the blood flow through the brain is not reversed.

The authors have performed an operation similar to Beck's on nine cases and the improvement noted in some of the patients has prompted this report.

This study was begun on children under observation in the Kalamazoo Cerebral Palsy Training Center. Prior to surgery each patient had a complete physical examination, birth and psychiatric evaluation. Laboratory studies included spinal

fluid examinations, pneumoencephalograms and electroencephalograms.

A cervical arteriovenous fistula was constructed on the right side of the neck, using the common carotid artery and the internal jugular vein.

Postoperatively, spinal fluid pressure readings were taken before discharge from the hospital and the children were studied further by the interested pediatricians.

In the adults, who were post-stroke victims with residual motor and mental defects, a neurological examination, the usual laboratory studies, and a spinal fluid examination were performed. Kidney function tests, electrocardiograms, and more detailed studies were done when indicated.

The same general operative procedure was used in all cases. A transverse incision was made above the right clavicle and parallel to it, extending from the midline as far laterally as was deemed necessary for exposure of the carotid sheath. The sternocleidomastoid muscle was cut, exposing the carotid sheath. The internal jugular vein was dissected free from the level of the clavicles to the base of the skull, and all branches leading into it were ligated and divided. The common carotid artery was freed up from surrounding adventitial tissue and a Potts clamp was applied. The internal jugular vein was occluded above and below the Potts clamp, using heavy silk occluding ligatures with which the vein was tied to the Potts clamp. The artery and the vein were opened and a 3 to 4 mm. fistula was established, using a 5-0 running silk suture. The internal jugular vein was divided between the fistula and its entrance into the superior vena cava. After the Potts clamp was released, with all bleeding under control and the fistula functioning, the cut ends of the sternomastoid were approximated, using 2-0 chromic sutures. The platysma and skin were closed separately.

An intratracheal anesthetic was given and blood was available if needed. However, the blood loss was minimal. The patient was kept in oxygen for twenty-four hours and then was allowed to be up and about. Steam inhalations were used if hoarseness resulted from the intratracheal anesthetic.

Case Reports

Case 1.—R. A., a two-year-old white boy, was admitted on March 22, 1950, because of stiffness of all extremities and inability to talk. The child had had a difficult forceps delivery, which was followed by a brain hemorrhage. The child was blue at birth and was kept in an oxygen tent for three weeks after delivery. He had never walked, talked, or sat alone. After Dr. Perlstein had studied him in Chicago and had done electro- and air-encephalograms, other laboratory tests and psychiatric studies, he had been enrolled in the Kalamazoo Cerebral Palsy Training Center. Although he had always had difficulty in breathing and choked easily, he had been maintained on a good diet supplemented by vitamins and had had all his immunizations. There were no familial diseases.

There was stiffness and spasticity in all four extremities. The head was small for the size and age and there was a squint of the left eye. The Babinski was positive bilaterally, with bilateral ankle clonus and active knee, elbow and ankle jerks.

The blood count, urinalysis, and spinal fluid were normal. A pneumoencephalogram showed an asymmetric enlargement of the lateral ventricles, the right being larger than the left. The brain structure seemed to be shifted to the right of the midline. There was an area of cortical atrophy, primarily in the right parietal region, with an obliterative arachnoiditis over the whole right hemisphere. An electroencephalogram revealed marked asymmetry with a diminution in the right temporoparietal and occipital areas, both awake and asleep. There were left temporal spikes.

A diagnosis of spastic quadriplegia due to cerebral hemorrhage at birth was made.

On March 23, 1950, a cervical arteriovenous fistula was created between the right common carotid artery and the right internal jugular vein.

Postoperatively the patient developed a respiratory infection and an edema of both eyelids which disappeared on the fourth day. Since then the spasticity has decreased markedly. The child can now sit up alone and appears to be developing more rapidly. The electroencephalogram now tends towards the normal.

Case 2.—J. S., a three-year-old white girl, was admitted on March 27, 1950, because of generalized body stiffness and poor response and comprehension. She was a blue baby at birth and had had a cerebral hemorrhage, had been attending the cerebral palsy training center and was on the list for institutionalization at Coldwater, Michigan. Her diet consisted of milk and liquids. Two other children in the family were normal.

There was marked spasticity of all four extremities which were rigid, with the legs in a scissors position. The head was small for the body. The child was deaf and was unable to follow light with her eyes. There was a tonic neck reflex and all superficial reflexes were exaggerated. Scratch reflex and ankle clonus were present. The Babinski was positive bilaterally.

The blood count and urinalysis were normal. Spinal fluid pressure was 92 mm., with no change on compression of jugular veins. Pneumoencephalogram showed advanced cerebral atrophy, especially on the right, and a moderately advanced micro-cephalae. An electroencephalogram demonstrated very low voltage, fast activity in all leads while awake. During sleep, 1-2/second waves appeared as base line sway with super-

imposed low voltage fast activity. The right occipital and temporal area appeared to have higher voltage. No pattern or rhythm was seen in the record.

A diagnosis of spastic quadriplegia, probably due to anoxia at birth, and idiocy was made.

A cervical arteriovenous fistula was created between the right internal jugular vein and the common carotid artery in spite of the fact that the internal jugular vein was about one-fourth normal size.

The fistula failed to function because the internal jugular vein apparently drained only the extra-cranial blood from the anterior facial and lingual veins. Subsequently, a left cervical arteriovenous fistula was created, but again the left internal jugular vein was about one-fourth the normal size. This fistula failed to function also.

Apparently the child had bilateral lateral sinus thrombosis and most of the venous return was through diploe veins of the scalp and other collaterals.

The child was sent to Coldwater.

Case 3.—S. H., a two-year-old white boy, was admitted on April 25, 1950, because of frequent colds, earaches and inability to sit up or talk. The patient was a premature infant, with a birth weight of 3 pounds 11 ounces, and was cyanotic following delivery. He had been constipated since birth and had bowel evacuation only by enema. He could hear, but there was some question about his ability to see. When he stood up, he crossed his legs and kept them together. Although a poor eater, he was well nourished. He was slow in sitting and standing and had never talked. He had had measles and chicken-pox and no immunizations. There were no familial diseases.

This was a well-developed, inco-ordinate child, probably sightless, although the eyegrounds were normal. He had a running nose, the left ear drum was bulging and the tonsils were enlarged. There was spasticity in all extremities with all reflexes hyperactive. The Babinski was positive bilaterally, and there was bilateral ankle clonus.

The blood count and urinalysis were normal. A pneumoencephalogram showed advanced bilateral cerebral atrophy. An electroencephalogram revealed an abnormal slow record with a questionable slow wave focus in the left occipital area. Spinal fluid pressure was 160 mm; left jugular, 200 mm.; right jugular, 240 mm.; both, 400 mm.

On May 2, 1950, a right cervical arteriovenous fistula was created. The patient got along well except for edema of the eyelids. When this subsided on the fourth postoperative day, a lumbar puncture showed a pressure of 600 mm. The patient was discharged on the eighth postoperative day but was readmitted three weeks later because of vomiting and constipation. The spinal fluid pressure was still elevated, and x-rays revealed widening of the cranial sutures. Surgery was recommended but refused by the parents until June 22, 1950. When the arteriovenous fistula was dissected free, the jugular vein had thickened considerably. Clamps were placed above and below the fistula, and the jugular vein was opened opposite the fistula, which, because it measured 5 mm. in diameter, was closed down to 3 mm. using 6-0 silk. After the jugular vein was closed and clamps were released, the new fistula functioned well. A lumbar puncture at this time showed the spinal fluid pressure normal at 265 mm. The blood pressure now was 110/70.

The postoperative course was uneventful, and the child was discharged on June 29, 1950, with a functioning fistula and normal intracranial pressure. He has since been taking food well, and there has been no vomiting. The spasticity has decreased, and he is attempting to talk, walk, and sit up. A recheck electroencephalogram has not yet been done.

Case 4.—D. J., a two-year-old white girl, was admitted on April 7, 1950, because of spasticity and blindness since birth and a cold and fever of four months' duration. The child had had pneumonia in October, 1949, and again in January, 1950. Birth had been normal and full term. There were two other children in the family, both living and well. The patient had not been able to sit up alone. She had had immunizations for smallpox, diphtheria, and pertussis.

The child was unresponsive, could not sit up or stand, and appeared to be without vision. The right ear drum was gray and dull, with no visible landmarks. The heart was normal, but the lungs were filled with coarse tubular inspiratory and expiratory râles, especially over the hilar areas posteriorly. The extremities were moderately rigid, knee jerks were present, and the Babinski was positive.

The white blood count was 14,150 with 69 per cent polymorphonuclears, 29 per cent lymphocytes and 2 per cent eosinophils. The spinal fluid was normal. A pneumoencephalogram revealed (1) moderate hydrocephalus, probably on a basis of cerebral atrophy, with suggestive evidence for porencephaly of the right parietal lobe and (2) a peculiar mottling of the skull bones, raising the question of Cooley's anemia. The skull was enlarged. The electroencephalogram was abnormally low for the age. There was a questionable slow wave focus in the left parietal area.

A diagnosis of cerebral palsy, blindness, chronic bronchitis, and right otitis media was made.

On May 11, 1950, after adequate preparation, a right cervical arteriovenous fistula was created. A postoperative lumbar puncture was normal, and an electroencephalogram showed spike seizure discharges in the right parietal area.

The child was still blind on discharge, but the rigidity of the extremities had decreased somewhat.

Case 5.—J. M., a fifty-four-year-old white man, was admitted because of cerebral thrombosis with a right hemiplegia. He had been in good health until approximately three months previously, when he noticed paralysis on the right side. There had been no headache, loss of consciousness, pain, or abnormal sensation with this attack. The paralysis involved his face, eye, right arm and leg, and there was loss of speech. The day following the onset his blood pressure was 160/90. He

was observed at weekly intervals, and gradually the facial paralysis improved, until there was only residual muscular weakness. While he was able to walk with a crutch after three to four weeks following the onset, he was still unable to move his fingers, elbow or shoulder and the right arm had started to swell in spite of passive exercises.

The tongue deviated slightly to the right when protruded. The blood pressure in the right arm was 180/90; in the left, 160/80. There was slight slurring of speech. All reflexes on both sides were hyperactive. There was inability to flex the ankle and toes and to abduct, adduct or rotate the shoulder, elbow, wrist or fingers. The right arm was spade-like and the right hand was stiff and swollen. The quadriceps and the hip muscles were intact.

The blood count, urinalysis, and spinal fluid were normal. An admission fluorogram showed a normal chest.

A diagnosis of cerebral thrombosis with right hemiplegia as a complication of generalized arteriosclerosis was made.

On June 1, 1950, an anastomosis between the right common carotid artery and the internal jugular vein was done to increase the blood supply to the brain to relieve hemiplegia.

There were no postoperative complications. Several hours after operation the patient could close his right hand and make a fist. He moved his toes back and forth for the first time since his stroke. On the second day he could shake hands and flex his fingers, elbow and shoulder. He was walking with a crutch on the third day. Five days after operation the facial paresthesia decreased, and the patient could talk. On the eighth day he could climb up and down stairs, whistle, oppose all fingers with his thumb, and flex his wrist, elbow, shoulder, ankle and toes.

Three weeks later the patient was able to drive his car around the block. The swelling in his hand was almost completely gone. After another three weeks he was mowing his lawn.

Case 6.—G. V. H., a fifty-two-year-old white man, was admitted with a post cerebral hemiplegia on the left side. In 1943 the patient had had a stroke which was followed by double vision that persisted for five to six months. In September, 1946, another stroke paralyzed his left arm and leg. By 1948 he was able to walk fairly well with a cane, but had another stroke in July which affected the left side. The patient had been in coma for several hours during the first episode in 1943 and for two days during the attack in 1948. He remained in bed for six weeks unable to move his fingers or toes. then improved until he could move his arm, hand, fingers and leg but there was no strength in them. For the six months previous to admission he had developed sharp burning pain down the left leg for which he had been hospitalized at a Veterans Hospital for several months. At the time of the present admission, there was dull pain in the lower back, hip, and down the back of the leg with sciatic distribution. The entire left side drew up with pain.

The blood pressure was 180/110. The pupils reacted sluggishly to light and there was a slight stare. There was an unsustained nystagmus to the left. The tongue protruded to the left. There was slight tenderness in the left lower quadrant. Speech was slow. The patient dragged the left leg. Sensation to vibration and touch was diminished on the left. The Babinski was positive and there was ankle clonus on the left. There was some disuse muscle atrophy in the left thigh and hand.

The blood count and spinal fluid were normal. The urinalysis showed a faint trace of albumin, 100 to 150 red blood cells, 3 to 5 white blood cells and an occasional hyaline cast. The admission fluorogram showed an abnormal aorta.

A diagnosis of post-cerebral hemiplegia on the left with mental changes was made.

On June 30, 1950, a right cervical arteriovenous fistula between the common carotid artery and the internal jugular vein was created to increase the blood supply to the brain.

Immediately after operation there was an increase in blood pressure. The following day the patient could move his toes and hands. On the second postoperative day he was up and moving about. He was discharged on the ninth day slightly improved. Slow improvement had been expected because of the extreme muscle atrophy which would require further local treatment.

The patient was readmitted on July 15, 1950, because of bleeding from the operative wound. Oozing continued in spite of two blood transfusions. On July 24, exploration disclosed that a false aneurysm had formed at the distal end of the fistula and had ruptured. The internal jugular vein was ligated distal to the fistula, the false aneurysm resected and the opening in the carotid artery sutured. The improvement in motor function stopped after the fistula was eliminated. Further surgery was deferred because the patient continued to run a blood pressure of 260/150 at bed rest.

Case 7.—H. K., a fifty-two-year-old white man, was admitted with right hemiplegia following cerebral thrombosis. In July, 1949, the ends of his fingers and toes began to prickle. The patient was hospitalized when this condition became worse on exercise. He did not lose consciousness, but did not remember anything that happened for two days. There was no loss of speech, although the paralysis was on the right side and included his face. He was discharged after one month, was up and about after two more months and in another six months could look after himself. Since April, 1950, he had deteriorated, his movements having become slow and awkward and his speech slow.

Physical examination showed a slight limp of the right leg. Speech was slow. The Babinski was positive on the right and he was unable to flex his ankle. There was muscular weakness, but no sensory changes.

The blood count, urinalysis, and spinal fluid were normal. An admission fluorogram showed a normal chest.

A diagnosis of right hemiplegia following cerebral thrombosis was made.

On July 3, 1950, a 2 mm. cervical arteriovenous fistula

between the right common carotid artery and the internal jugular vein was created to improve the blood supply to the brain.

On the first postoperative day it was noted that the fistula was not working. The wound healed, but the fistula was still not functioning and there was no improvement.

Case 8.—G. R., a sixty-five-year-old white man, was admitted with aphasia and a right hemiplegia following four strokes. The patient had had three strokes in the past five years. About three years ago he lost his voice completely following a stroke. He had been unable to walk and had to use a wheel chair. The right arm and leg were still weak. Speech was slowed, spasmodic and unintelligible most of the time.

Physical examination showed the blood pressure on the right to be 180/130 and 210/140 on the left. Superficial abdominal and cremasteric reflexes were absent on the right. The Babinski was questionable on the right. Sensation was diminished on the right and absent to touch from the knee down. Position sense was poor on the right.

The blood count and urinalysis were normal. The spinal fluid Kahn was doubtful and the pressure was 190 mm.

A diagnosis of speech aphasia and right hemiplegia following cerebral thrombosis was made.

On July 10, 1950, a cervical arteriovenous fistula between the right common carotid artery and the internal jugular vein was created to increase the blood supply to the brain.

Several hours after operation the patient could speak distinctly at times and had better motion in his hand. The next day his speech had improved further as had the motion in his hand and foot. The pain had left his right arm and leg. On the second postoperative day speech was very distinct. He was able to walk four days after operation. Two weeks later he could pronounce many words he had been unable to enunciate since the onset of his aphasia. The pain in his right arm and leg had diminished, and he was able to get around better.

Case 9.—G. A., a forty-eight-year-old white man, was admitted in July, 1950, with left hemiplegia following cerebral thrombosis, that had occurred on May 31, 1950. It was believed that his hemiplegia had been caused by an embolus since he had rheumatic heart disease(inactive), cardiac hypertrophy and dilatation, mitral stenosis and regurgitation, Grade III, and generalized arteriosclerosis.

The patient was on digitalis and was fibrillating. The blood pressure was 110/68, there were râles at the base of the left lung posteriorly and there was complete loss of function of the left arm and leg. The facial muscles were hard to evaluate. The apex of the heart was palpable in the fifth interspace in the anterior axillary line and the area of cardiac dullness extended to the mid-axillary line. There was a palpable thrill. On auscultation there was a rough presystolic and blowing systolic murmur loudest at the apex.

The blood count, urinalysis and spinal fluid were normal. An electrocardiogram showed rapid auricular fibrillation, with no digitalis effect.

On July 25, 1950, a right cervical arteriovenous fistula was created, surgery being uneventful.

The patient was kept in oxygen for three days after operation. On the first postoperative day he complained of tingling sensations in his left foot and arm. He was able to move his toes on the fourth postoperative day. Three weeks later, the patient, still confined to bed because of his cardiac status, stated that the paresthesias had increased, but had no motion in his hand or foot. He complained of a buzzing noise in his right ear.

Discussion

Table I compares the effects of traumatic arteriovenous fistulas with surgically created cervical and femoral arteriovenous fistulas. It demonstrates the effects produced when the vein is ligated and divided between the fistula and the heart.

Increased intracranial pressure occurs if the cervical arteriovenous fistula is made too large. The symptoms disappear as soon as the fistula is made smaller or eliminated.

The fistula effects in the limbs, with the proximal venous limb ligated and divided, put no increased load on the heart.

The surgery consists of making a 3 mm. fistula between the common carotid artery and the internal jugular vein after all branches emptying into it have been ligated between the site of the fistula and the base of the skull. The branches of the internal jugular vein encountered are usually muscular branches from the sternomastoid, the anterior facial and the ranular, which often join and enter via a common trunk and a thyroid branch.

The sternocleidomastoid muscle can be cut transversely and heals in the same manner as any other muscle, by means of a fibrous tissue band of scar tissue.

The ansa hypoglossi lies in the carotid sheath and need not be disturbed during the dissection.

The dome of pleura may be encountered in the region of the clavicle, but it is of no concern unless it is opened. The vagus nerve lies posteriorly and need not be disturbed in this dissection.

Before anastomosing the internal jugular vein and the common carotid artery, the perivascular and adventitial layers should be dissected from the region of the anastomosis.

The vessel can be occluded by means of tem-

TABLE I

In General, Arteriovenous Fistula Effects Depend Upon:
1. Size of fistula
2. Caliber of affected artery
3. Duration of the fistula

Effects On Arterial Side	Effects On Venous Side	Effects On Heart	Effects On Head	Effects On Limbs
1. Decreased peripheral resistance 2. Decreased general blood pressure 3. Decreased diastolic blood pressure (Water hammer pulse) 4. Lowered aortic pressure 5. Increased blood volume 6. Increase in size of aorta 7. Increase in collaterals 8. Capillary pulsations	1. Increased venous pressure 2. Increase in caliber of veins 3. Increased thickness of vein walls 4. Increased venous oxygen 5. Decreased CO_2 6. Increase in collaterals 7. Capillary pulsations 8. Aneurismal dilatation	1. Increased right auricular pressure 2. Right heart hypertrophy 3. Right heart dilation 4. Right heart decompensation 5. Increased blood volume 6. Increased work 7. Elevated rate 8. Increased cardiac output 9. Increased minute volume 10. Reduction in coronary flow 11. Flow like aortic regurgitation (Low diastolic, high pulse pressure, collapsing pulse)	1. Increased intracranial pressure 2. Increased blood flow? 3. Increased oxygen to brain? 4. Increased collaterals 5. Capillary pulsations 6. Bruit and thrill at fistula site	1. Increase in size 2. Increase in temperature 3. Venous engorgement 4. Edema 5. Palpable thrill at fistula 6. Bruit at fistula site
Surgically Produced Cervical Arteriovenous Fistula Effects are Sudden, Profound, Dramatic				
None	1. Increased venous pressure 2. Increased caliber of veins 3. Increased thickness of vein walls 4. Increased venous oxygen 5. Decreased venous CO_2 6. Capillary pulsations?	None	1. If too large, increased intracranial pressure 2. Increased blood flow? 3. Increased oxygen to brain? 4. Increased collaterals 5. Thrill at site of fistula 6. Bruit at site of fistula	Note
Surgically Produced Arteriovenous Fistula in Limbs is Used to Increase Blood Supply to Arteriosclerotic Limbs				
1. Increase in collaterals 2. Capillary pulsations	1. Increased venous pressure 2. Increase in caliber of veins 3. Increase in thickness of vein walls 4. Increased venous oxygen 5. Decreased CO_2 6. Increase in collaterals 7. Capillary pulsations	None	None	1. Increase in size 2. Increase in temperature 3. Venous engorgement 4. Edema 5. Palpable thrill at fistula site 6. Bruit at fistula site

porary ligatures, bulldog clamps or with a Potts clamp. All of these methods have been used and have proven to be satisfactory.

The fistula should measure approximately 3 mm. in diameter. The vessel walls are sutured with a running 6-0 silk suture. Continuous or separate sutures may be used for the anterior and posterior rows.

If the fistula is made too large, the patient develops signs and symptoms of increased intracranial pressure (separated sutured and increased spinal fluid pressure). This is eliminated immediately by surgically reducing the size of, or eliminating, the fistula. In the case of S. H., the fistula area was dissected out completely and the vien wall was found to have hypertrophied up to the size of the artery. Several small aneurysmal areas were present where the wall had thinned out. Clamps were placed above and below the fistula, and the jugular vein was opened up widely, completely exposing the arteriovenous fistula. The six weeks' old silk sutures were visible, but they were covered by fibrin. The fistula was narrowed from 5 mm. to 3 mm. in diameter, and the incision in the internal jugular vein was closed. By the time the surgical incision was closed, the spinal fluid pressure had returned to normal, as evidenced by a lumbar puncture. Because of this experience in an infant, we have been careful to measure the size of the fistulas in adults and to do a spinal puncture immediately after closure of the neck.

In one case (C. S.), the left internal jugular vein was atrophic and even though an anastomosis was made, the fistula never functioned. A fistula was

TABLE II

Case	Initials	Age and Sex	Diagnosis	Accompanying Disease	Operation	Complications	Results So Far
1	RA	2 M	Cerebral palsy; Spastic quadriplegia	Difficulty in respiration	Rt. A-V fistula	Transient edema of eyelids	EEG improved; Spasticity decreased; Can sit alone; Trying to talk.
2	CS	3 F	Spastic quadriplegia	Idiocy	Rt. A-V fistula	Nonfunctioning fistula	No improvement
					Lt. A-V fistula	Nonfunctioning fistula	No improvement
3	SH	2 M	Cerebral palsy	Constipation	Rt. A-V fistula	Increased intracranial pressure from too large a fistula	Vomiting
				Increased intracranial pressure from too large a fistula	Surgical reduction in size of fistula	Edema of eyes	Decreased spasticity; Attempting to walk, sit and talk
4	DJ	2 M	Cerebral palsy; Blind	Rt. otitis media; Chronic bronchitis	Rt. A-V fistula	Rt. otitis media	Still blind; decrease in spasticity
5	JM	54 M	Cerebral thrombosis Rt. hemiplegia	Generalized arteriosclerosis; Essential hypertension	Rt. A-V fistula	None	Return of motor and sensory function to rt. side; Can walk, use hand to eat, shave and work
6	GV	52 M	Lt. hemiplegia; cerebral hemorrhage	Essential hypertension; Disuse atrophy of muscles of lt. side.	Rt. A-V fistula	Ruptured false aneurysm 1 month post op.	Decrease in tremor
			Ruptured false aneurysm	Benign prostatic hypertrophy; Hemorrhoids	Closure of fistula	Thrombosed hemorrhoids	No improvement
7	HK	52 M	Cerebral thrombosis; Rt. hemiplegia	Generalized thrombosis	Rt. A-V fistula	Nonfunctioning fistula	No improvement
8	GR	65 M	Rt. hemiplegia; Speech aphasia after 4 cerebral hemorrhages	Essential hypertension; Generalized arteriosclerosis	Rt. A-V fistula	None; Buzzing noise in rt. ear	Return of speech; Improvement in memory for recent events; Decrease in pain in rt. arm; decrease in spasticity
9	GA	48 M	Cerebral thrombosis; Lt. hemiplegia	Rheumatic heart disease with auricular fibrillation	Rt. A-V fistula	Auricular fibrillation; Buzzing noise in right ear	Improved(?) motion in left foot; Paresthesia in left hand

made on the right side one week later. No detrimental effects occurred, although the scalp veins became more prominent.

The effects of a surgically produced arteriovenous fistula are sudden and profound upon the entire system, and the outward appearances are dramatic. In adults the immediate results of the fistula become evident almost as soon as the patient comes out of the anesthetic, as in the case of J. M., who had a flail right arm and leg prior to surgery. He was able to oppose all fingers with his thumb in one week, to climb stairs, to smile and whistle. He could drive a car three weeks after surgery and hopes to return to work six weeks after surgery.

If the fistula is made too small, it usually does not function and the jugular vein thromboses.

One of the problems peculiar to this type of surgery is the shunting of too much blood to a part, which may produce untoward results, as in the case of S. H., where the intracranial pressure was increased dangerously.

Another complication, encountered in the case of G. V. who had a resting blood pressure of 250/150, was the formation of a false aneurysm which formed at the distal end of the cervical arteriovenous fistula and ruptured spontaneously one month postoperatively. This was controlled by eliminating the fistula and sewing up the defect in the carotid artery.

The purposes of endotrachael anesthesia in these cases are twofold. First, it insures a patent airway when the head is twisted to one side. This is especially true in children. Second, it is the only method which provides a means of establishing a completely closed system essential for pressure anesthesia. Pressure anesthesia is of primary importance if the pleura is punctured. This complication has not appeared in this series.

The length of time of observation for these cases has been short and the number small, but so far the results are encouraging and are superior to results obtained with any other type of therapy.

Table II summarizes the nine cases presented.

(Continued on Page 1205)

Fresh Fractures of the Shaft of the Femur

Current Methods of Treatment

By John E. Summers, M.D.
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IN order to obtain information concerning the present methods of treating acute fractures of the shaft of the femur, questionnaires were sent to each chief of orthopedic surgery of the hospitals listed in the *Journal of the American Medical Association* (May 1, 1948), as being approved for residency training in orthopedic surgery.

Of the replies to the questionnaire, 113 were sufficiently clear and definite enough to be included in this survey.

Closed Reduction

Eighty-three orthopedic surgeons (73.4 per cent) prefer to utilize closed methods of reduction for fresh fractures of the femoral shaft in adults.

Open Reduction

Thirty orthopedic surgeons (26.6 per cent) prefer to perform open reduction for acute femoral shaft fractures in adults.

Closed Reduction Methods Employed

Traction is the most popular method of closed reduction. Caldwell of New Orleans writes:

"When traction is promptly applied and efficiently followed, it is seldom necessary to perform an open reduction."

Hammond of Sayre, Pennsylvania, states:

"I am in disagreement with those who favor early open reduction because practically all fresh fractures of the shaft of the femur can be treated conservatively by continuous traction."

Skeletal traction employing a Kirschner wire is generally used. The Kirschner wire may be inserted through the upper end of the tibia or above the femoral condyles or rarely through the os calcis.

A few orthopedists prefer skin traction.

Balanced traction is the most popular form of traction in use at the present time.

Since balanced skeletal traction is the most generally used method for treating acute femoral shaft fractures it is fitting that the procedure be explained in detail. This is best done by quoting Bolibaugh of San Francisco:

"Insofar as the actual treatment of the fracture is concerned, it is our practice to insert a Kirschner wire through the crest of the tibia for skeletal traction. The extremity is then suspended in a Thomas splint from a Balkan frame, in other words, balanced skeletal traction.

"It is our policy to apply the maximum weight immediately to overcome the shortening and obtain alignment of the fragments. Twenty-five to forty pounds are required according to the circumstances and size of the individual. The foot of the bed is elevated so that the body counteracts the weight of the skeletal traction on the femur.

"Check x-rays may be taken within twenty-four or forty-eight hours to determine if there is any distraction or angulation due to inadequate traction. The amount of traction required to maintain alignment and apposition of the fragments is used; 12 to 15 pounds are usually required. Experience and very careful supervision of the patient is necessary to prevent distraction or angulation. . . .

. . . . It is our practice to maintain the bone in not more than 5 or 10 degrees of flexion. Quadriceps exercises are started within a few days and the patient is required to contract this muscle group at least 200 times an hour during the day. Various types of foot supports are used. These are never rigid, but are maintained with elastics in order to support the foot in the neutral position and allow active flexion, extension, inversion and eversion as well as motions of the toes.

"When there is sufficient callus to warrant it, we start active motion of the knee with the Pearson attachment on the Thomas splint. The time varies considerably in different patients, but usually between the second and third month. About this time, skin traction will be substituted for skeletal traction. When we feel that there is adequate callus, we allow the patient to remove his leg from the splint and exercise his knee over the side of the bed. It is roughly six months before the patient is allowed weight bearing. If union is firm, as demonstrated clinically and by x-ray, no brace is used. On the other hand, if union is not complete we frequently allow these patients up with an ischial bearing caliper brace. Active physiotherapy is continued throughout the course of the treatment in order to prevent as much atrophy as possible and to maintain the joints in as normal state as possible consistent with adequate immobilization of the fracture."

When such prolonged hospitalization is impractical, a plaster hip spica cast may be applied after adequate callus formation, as demonstrated by x-ray, has occurred. O. C. Hudson of Hempstead, Long Island, as representative of this more practical viewpoint, states:

"When clinically solid and after ten to twelve weeks of traction, a spica is applied until bony union is solid.

Quadriceps exercises and toe exercises are begun the day of the injury and continued thirty times an hour for ten hours a day during the entire period of healing."

It is interesting to note that when treating transverse fractures of the shaft of the femur O. C. Hudson prefers to have the fractured ends overlap and not to meet end to end.

C. H. Wilson, working at the Tennessee Coal, Iron and Railroad Company Hospital in Birmingham, Alabama, writes:

"As yet we have not found any method to substitute for the treatment of these fractures with suspended balanced skeletal traction which is maintained until union is firm enough for plaster cast immobilization. Our experience with open reduction has not given the good results as received by the above skeletal traction. This opinion is based on approximately 100 fresh fractures of the femur seen each year."

Russell traction is another way of utilizing traction in the treatment of fresh fractures of the shaft of the femur and it has several strong advocates. C. F. Clayton of Fort Worth, Texas, writes:

"The Russell method is applicable to practically all shaft fractures, whether transverse, oblique, spiral or comminuted, and at whatever level in the shaft, from the trochanteric downward to and including the distal end."

McCusker, of Providence, Rhode Island, writes:

"We have been making an analysis of our femoral shaft fractures at the Rhode Island Hospital between 1931 to 1946 inclusive. We had a total of 566 cases of which 346 were treated by Russell traction throughout with complete satisfactory end results."

M. J. Wilson of New York has treated over 600 fractures of the shaft of the femur with Russell traction. He has described in detail the proper application of Russell traction.

"The Fixed Traction Spica" Method

A very interesting way for maintaining continuous traction with the patient in a double hip spica cast is being used by R. A. Moore of Winston-Salem, North Carolina. Skin traction is usually used, and the patient can be sent home in a few days.

Pin and Plaster Method

The pin and plaster method of holding the fragments of the fractured femur in position was originated by H. W. Orr of Lincoln, Nebraska, and is used by several workers at the present time. This entails manipulation of the fracture, the insertion of several pins through the fragments, and the incorporation of the pins in a plaster cast.

Open Reduction as Second Choice

While 73.5 per cent of the orthopedists prefer to treat fresh fractures of the shaft of the femur by closed reduction, most of them perform open reduction in a certain percentage of their cases.

As representative of this group, I quote R. H. Alldredge of New Orleans:

"If the fracture does not respond properly and fairly immediately to this method of treatment (balanced skeletal traction), I perform an open reduction operation, using either plates and screws or in some cases the intramedullary nail of Kuntscher."

The trial period of time allotted traction to permit reduction of the fractures varies from forty-eight hours to two weeks. C. Scuderi of Chicago writes:

"It has been our opinion that fractures of the shaft of the femur had best be treated by skin traction, using well-applied Buck's extension and that if the position is not satisfactory within a matter of five to seven days, it has been our practice to do an open reduction with internal fixation using metal plates and screws."

Parnall of Albuquerque, New Mexico, prefers balanced skeletal traction but finds that probably 30 to 45 per cent come to open reduction.

McLemore of Seattle writes:

"I dare say that approximately 75 per cent of my cases of fractures of the shaft of the femur are treated by manipulation, pins and spica cast, whereas approximately 25 per cent are treated by open reduction and plating, followed by plaster cast fixation."

Several workers in this group prefer to perform immediate open reduction when the fracture is in the upper third of the femoral shaft.

Open Reduction: Fresh Simple Femoral Shaft Fractures

Open reduction and plating is the procedure of choice of 26.6 per cent of the orthopedic surgeons when treating most fresh femoral shaft fractures. Quoting from the correspondence of representative surgeons in this group:

Edward Compere of Chicago:

"Fresh fractures of the shaft of the femur in adults are treated on my service by open reduction and internal fixation with an anterior and a lateral metal plate, in

most instances. This method permits early ambulation with crutches and an ischial weight-bearing splint."

Donaldson of Pittsburgh:

"Of late years there is a greater tendency on our part to reduce the fracture by open reduction and plating at one sitting. In the aged such plating is desirable as soon as possible and we feel it should be reinforced by a second plate."

McLaughlin of New York:

"We feel internal fixation to be indicated in all fresh adult fractures of the shaft. Internal fixation is used in the form of plates and screws in most cases."

J. S. Speed of Memphis:

"I might say that our criteria for treatment of fractures two or three inches below the greater trochanter is by open reduction and some type of internal fixation."

Mumford of Indianapolis:

"I am a 'radical' against the promiscuous use of metal in fracture work, and as stated am of the opinion that efficient external splintage must supplement internal fixation. The exception to this opinion and to these rules is in the treatment of a fracture of the shaft of the femur, in that the most satisfactory plan is the use of two metal plates for immobilization and the after care is that of a Thomas splint with a Pearson attachment. But such exceptions are made not for the healing of the fracture but for the prevention of the stiffness and loss of function in the knee joint."

Among those who prefer to use balanced skeletal traction for most femoral shaft fractures, there are several who prefer open reduction for fractures in the upper third of the shaft. Van Gorder of Boston, who prefers balanced skeletal traction, writes:

"In supracondylar fractures, I almost always operate and do an open reduction."

Several surgeons prefer to pack cancellous iliac bone chips around the fracture site at the time of operation; others have expressed the value of using the Eggers slotted plate.

Medullary Nailing

A few workers in this country have begun to use medullary nailing for femoral shaft fractures.

R. K. Lippman, New York, states:

"I should like to state that my recent preference in the treatment of simple femur fractures in adults is with the Kuntscher nail."

H. Cooper, Peoria, Illinois:

"I have done about six femurs by means of the Kuntscher bar."

Mazet, Los Angeles:

"I think that we are pretty much agreed now that balanced traction or intramedullary nailing is better."

D. Street, Memphis:

"Simple fractures which are fresh and require no open reduction for reduction, we treat either with balanced skeletal traction or by medullary nailing using closed manipulation. The convalescence is greatly reduced by the use of a medullary nail since patients can be ambulated about three weeks and fully weight-bearing at six weeks."

J. E. M. Thomson, Lincoln, Nebraska:

"In fractures of the upper third of the femur, and even in some of the middle and lower third, that is five or six inches above the condyles, or five inches below the trochanter, I am using, in certain selected cases, Kuntscher intramedullary pins. I think it is particularly preferable for fractures of the upper third of the femur to any other method."

Severely Comminuted Fractures

Severely comminuted fractures of the femoral shaft are best treated by balanced skeletal traction.

Compound Fractures of the Femoral Shaft

In badly comminuted compound fractures of the femoral shaft such as those incurred in battle, balanced skeletal traction is the preferable method of treatment. Thus Collom and Ewing reporting on 100 cases of femoral shaft fractures resulting from battle, eighty-two of which were compound and 75 per cent were severely comminuted, write:

"Both from the standpoint of wound healing and fracture alignment, reparative surgery consisting of secondary closure of wounds, with drainage, and skeletal traction, has been most satisfactorily instituted in the period from five to ten days after injury."

However, if the patient is seen soon after the fracture has occurred and when the comminution is not too severe, debridement, internal fixation and primary closure of the wound may be warranted. In this connection, Davis reported a series of 150 consecutive compound fractures treated by debridement, excision of all questionable skin, the use of split-thickness skin grafts to close wound defects, primary suture of the wound and the application of compression dressings.

Fractures of the Shaft in Children

Open reduction for fractures of the shaft of the femur in children is rarely indicated. Traction is the method of choice.

Van Gorder of Boston prefers Bryant's overhead traction for children under six years of age and traction (Russell or using a Thomas splint) in older children.

Schmidt, from the Milwaukee Children's Hospital, writes that all fractures of the femur in children under twelve are treated with balanced traction, namely, Russell's traction. Skin traction is preferred and no plaster cast hip spica is used.

Blount, Schaefer and Fox reviewed 280 cases of fracture of the femur in children treated at the Milwaukee Children's Hospital finding that fifty patients had sustained a fracture in the upper third of the femoral shaft, 194 in the middle third and thirty-seven in the lower third. In babies and children up to the age of four or five years, Bryant's traction was used; in older children, Russell traction was the method of choice. Skin traction was applied, and three to six pounds' weight was required. The traction was continued until massive callus had formed which was no longer tender. They state:

"We are certain now that there was no justification for open reduction in any case in our series. Normal apposition is not only unnecessary but may be less desirable than bayonet apposition. In the middle third, overriding of one-half inch is preferable to end-to-end apposition. An average overgrowth of the fractured bone of one-half inch may be expected."

Pease, from the Children's Memorial Hospital in Chicago, writes:

"It can be said that fractures of the femur in children should never require any operative interference for reduction. Adequate traction should be applied and as long as alignment is satisfactory in both antero-posterior and lateral planes an excellent result can be expected. If as much as one inch overriding occurs, overgrowth of the femur will, as a result of stimulation due to increased vascularity, compensate for the shortening. Fractures of the femur which are reduced with end-to-end apposition often result in an overgrowth of the extremity."

Summary

One hundred and thirteen leading orthopedic surgeons responded to a questionnaire concerning the present methods for treating fresh fractures of the shaft of the femur.

Seventy-three per cent of these preferred to treat such fractures by closed reduction. The large majority of this group preferred balanced skeletal traction. Actually, many surgeons, while preferring balanced skeletal traction, tend to perform open reduction early if the fracture is not promptly reduced by traction while others prefer to treat certain fractures of the shaft by immediate open reduction, i. e., fractures occurring in the upper one-third of the femoral shaft.

Twenty-six per cent prefer to perform open reduction and apply internal fixation for most fresh femoral shaft fractures. Plates with screws are generally used to hold the fragments.

A few surgeons are using, in selected cases, the medullary nailing of Kuntscher. One worker stated that this was his method of choice in the treatment of fresh femoral shaft fractures.

Severely comminuted fractures are best treated by balanced skeletal traction.

Compound fractures may be treated by debridement, internal fixation and primary skin closure, depending on the time that the patient is seen, the amount of contamination, and the degree of comminution.

Fractures of the femoral shaft in children under five years of age are treated by Bryant's overhead traction; from five to twelve years of age by Russell traction or balanced skin traction. It is undesirable to secure anatomical replacement of the fractured bone ends in children because of the tendency for the fractured bone to exceed the normal bone in growth.

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Congenital Malformations of the Heart

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RECENT ADVANCES in the surgical relief of congenital malformations of the heart have created a greater need for more definitive diagnosis of these conditions. Abbott's classification of congenital heart disease serves as an excellent foundation upon which to build the present discussion. Patients in whom there is an arterial-venous shunt, such as in patent ductus arteriosus, interauricular septal defect or interventricular septal defect, ordinarily do not show cyanosis. Conditions in which there is a venous-arterial shunt, such as in the tetralogy of Fallot, tricuspid atresia or transposition of the great vessels, usually exhibit cyanosis. Cyanosis is also absent in cases where there is no abnormal shunting of blood, such as in coarctation of the aorta and in double aortic arch. Some of these conditions will be discussed in detail because of the fact that satisfactory surgical means exist for alleviation or correction of the defect.

Ordinarily the ductus arteriosus gradually closes after birth in a varying period of time, usually being obliterated by the sixth month. If the ductus arteriosus remains open, one may hear in infancy a short systolic murmur which is best heard in the second left interspace. As one follows the course of that particular patient, a longer systolic murmur which is eventually accompanied by a short diastolic murmur will develop; and usually by three years of age the typical murmur has developed, a murmur which is continuous, roaring, rumbling, machinery-like, humming-top in character, a murmur which is best heard in the second left interspace, almost equally well heard in the first left interspace and the diastolic eomponent of which diminishes very markedly in the third interspace. This murmur does not usually change in character or quality with change in position, in contrast to the sound associated with a venous hum, which is heard best over the head of the clavicle and which is louder upon sitting up than upon lying down. Since this is a shunt of blood from the arterial to the venous circuit there is no cyanosis. Occasionally a patent ductus arteriosus may shunt as much as 70 to 80 per cent of the arterial blood. This abnormal shunt results in a lessened blood supply to the tissues which is reflected by the thin, gracile habitus of the patient. A marked pulmonary congestion also occurs and is reflected by the prominent pulmonary conus and vascular lung fields which are seen in the x-ray and at fluoroscopy. Because of the additional work placed upon the left ventricle, enlargement of this chamber becomes apparent in a varying period of time depending upon the magnitude of the arterial-venous shunt. In addition to the above findings, there is evidence upon physical examination of an aortic insufficiency, which one would expect to find in this condition. This is manifested by the presence of a femoral thud, Corrigan pulse, capillary pulse and a high pulse pressure. If the blood count shows polycythemia or if the electrocardiogram shows right heart strain, one should suspect that the patent ductus arteriosus is not the only cardiac malformation present. Ordinarily, the electrocardiogram shows either left axis shift or left heart strain and occasionally may even show right axis shift. Surgical treatment consists of ligation or, preferably, of section and suture of the ductus arteriosus. Approximately 125 cases have been operated upon at Children's Memorial Hospital with no fatalities. In our experience a soft systolic murmur in the second left interspace remains postoperatively in 40 to 50 per cent of cases. This may represent a functional murmur or may be due to eddy currents in a dilated pulmonary artery.

In the tetralogy of Fallot the onset of cyanosis is usually not at birth but typically occurs between the second and sixth month of life, at which time one might postulate the closing of the ductus arteriosus. Occasionally these children are cyanotic at birth, and in such cases one should suspect the possibility of a complete atresia of the pulmonary artery. Usually a heart murmur has been heard from birth or shortly thereafter. The only other thing of interest in the history is the instinctive desire of these children to assume a squatting position to catch their breath following physical exertion. Taussig states that practically all children "squat" who have inadequate blood supply to the lungs. Approximately 80 per cent of our cases have such a history. Physical examination usually reveals a cyanotic child with a heart that is

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not particularly enlarged and a blowing systolic murmur over the precordium which is best heard in the second and third left interspace. A systolic thrill is usually palpable over this same area. In our experience the murmur which we hear is most likely due to the pulmonary stenosis rather than to the interventricular septal defect. Observations at surgery and at the postmortem table have taught us to suspect the presence of a pulmonary atresia whenever a typical blowing systolic murmur is not present. The only other interesting feature in the physical examination, and at the same time a very important part of the examination, is the presence of a diminished second sound in the second left interspace. This would be expected in a pulmonary stenosis or a pulmonary atresia. X-ray and fluoroscopy show the presence of a typical boot-shaped heart in the anteroposterior view with a clear pulmonary window, a good shelf and possibly slight enlargement of the body of the right ventricle and of the right auricle. The electrocardiogram shows right heart strain.

From the embryological viewpoint, tricuspid atresia is quite different from tetralogy of Fallot. As the name implies, the tricuspid valve is atretic; hence, the blood enters the right auricle, crosses over to the left auricle through an interauricular septal defect, passes into the left ventricle, and then may pass out into the aorta and to the lungs through a patent ductus arteriosus or may pass from the left ventricle into a diminutive right ventricle through an interventricular septal defect, and hence out into the pulmonary artery which is hypoplastic. The clinical features, on the other hand, are similar in many ways to those of the tetralogy of Fallot. The only difference from the standpoint of history is that ordinarily the onset of cyanosis is earlier, and they do not fare as well as the usual tetralogy of Fallot; hence they usually require surgery at an earlier age. The only difference upon physical examination is that the heart may be slightly enlarged and a pulsating liver may be present, in which case one should suspect the presence of a rather small defect in the interauricular septum. In the x-ray there is usually a characteristic gentle rounding or convexity along the left upper salient of the heart, and one may or may not be able to demonstrate a small right ventricle and an enlarged left ventricle; however, the electrocardiogram is the diagnostic feature in this condition, for it is one of the rare instances in cyanotic congenital malformations of the heart where left heart strain is usually demonstrable. Surgical treatment consists of a Blalock or Potts-Smith type of procedure. Occasionally these children show a poor response to surgery and develop congestive failure. In a significant number of such cases a small interauricular septal defect has been demonstrated. Consequently, if a small interauricular septal defect is suspected, the treatment of choice is to increase the size of the septal defect in addition to the usual anastomosis.

Coarctation of the aorta is frequently overlooked in infancy and early childhood. There are two reasons for this being true. First, if we discard the cases of so-called "infantile type" of coarctation of the aorta who usually expire within the first year of life, the children with the "adult type" of coarctation of the aorta are usually robust and healthy in appearance. Second, the attending physician has neglected to palpate for pulsations in the femoral vessels, a procedure which practically establishes the diagnosis. The onset of symptoms is usually in late childhood or young adulthood when they may begin to complain of easy fatigability, headaches or pain in the legs. Unfortunately, occasionally they come to the attention of a physician at the time of a cerebrovascular accident. Physical examination usually reveals a sturdy child with no cyanosis. The heart may be slightly or moderately enlarged and a systolic murmur may be heard over the precordium. Pulsations and a thrill in the suprasternal notch are rather constant findings. Subaortic stenosis is a frequently associated lesion and should be suspected in the presence of an additional systolic murmur which is unusually loud in the second right interspace. Bruit and pulsations may be apparent along the medial and inferior border of the scapulae and in the intercostal spaces. These findings represent the collateral circulation which is compensating for the coarctation. Pulsations in the femoral vessels are diminished or absent. There is a hypertension in the arms and the blood pressure in the legs may be diminished or unobtainable. X-rays and fluoroscopy may reveal some degree of enlargement of the left ventricle. The x-ray may also show notching of the ribs; however, this is rarely demonstrable before the age of seven and is not a common finding until late childhood. The electrocardiogram may show left axis shift or left heart strain. Surgical treatment consists of excision of the affected area and end-to-end anastomosis of the aorta.

Double aortic arch, or any type of anomaly involving the aorta or its branches in which the esophagus and/or trachea are encircled by a vascular ring, is a condition which is amenable to surgery and is usually recognizable early in life. Frequently there is a history of stridor or wheezing from birth. Dysphagia is often observed when the infant starts to take solid foods. A croupy cough may be present and recurrent pulmonary infections occur. The heart is normal unless an unrelated condition is present. The esophagram is diagnostic for this condition, showing an indentation of the esophagus in the anteroposterior and lateral views at the level of D_4 or slightly above or below, depending upon the type of anomaly present. Surgical treatment consists of severing the vascular ring at the indicated point. In the case of a double aortic arch the smaller segment is interrupted, this usually being the anterior arch.

The general care of cyanotic children may occasionally pose quite a problem. This is especially true in the presence of any disease where the child is in danger of becoming dehydrated. Such dehydration should be avoided as much as possble in order to avert the danger of cerebral thrombosis. We feel that these children should receive their routine immunizations at the prescribed time. The prenomenon of paroxysmal dyspnea in cyanotic children is extremely interesting and at times very dramatic. In our experience any child who has a sudden attack of increased cyanosis associated with dyspnea, hyperpnea or apnea, should be assumed to have an attack of "paroxysmal dyspnea." Treatment for such an attack consists of placing the child in a knee-chest position, administering oxygen and giving morphine in a dose of one milligram per ten pounds of body weight. The apparent contradiction of administering morphine to an individual suffering with dyspnea or apnea is justified when one sees the dramatic improvement in the condition of the child.

In conclusion, the diagnosis of acyanotic congenital malformations of the heart is relatively easy, and simple diagnostic procedures are usually adequate. On the other hand, the diagnosis of cyanotic conditions may be very difficult, and the lesions which are finally demonstrated may be quite complex. We have found it necessary to resort to catheterization or angiocardiography in only 5 per cent of the cases which have been submitted to operation; however, there are many more cyanotic children in which the diagnosis is not obvious even after catheterization and angiocardiography. Nevertheless, application of the diagnostic principles above will enable a clinician to select most of the cases amenable to surgery from among those which come to his attention.

1010 B Street

MSMS

OBESITY IN CARCINOMA CERVIX UTERI

(Continued from Page 1178)

Summary

1. Obesity was found in 12 per cent of a series of 263 consecutive cases of carcinoma of the cervix uteri.

2. Factors complicating diagnosis and treatment in the obese woman are enumerated.

3. Absolute five-year survival figures on ninety-nine consecutive cervix cancer patients treated by x-ray and radium prior to 1944 show a survival rate of 50.5 per cent. In the obese woman, the survival rate declines to a 37 per cent average.

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THERAPY OF BLOOD DISEASES

(Continued from Page 1190)

severely damage the hemopoietic tissue with resultant anemia and hemorrhage. X-ray to the spleen is about the most effective therapy though P_{32} may be equally effective. Urethane and HN_2 are not as useful as x-ray and radioactive phosphorus in chronic lymphatic leukemia, and the folic acid antagonists appear to be contraindicated.

In this paper I have tried to briefly point out the site of action and mechanism, where known, of the most commonly used medication for the treatment of thromboembolic disease, anemia and leukemia—and insofar as possible correlate the use of these forms of therapy with basic knowledge regarding blood coagulation, erythropoiesis, et cetera—and thus indicate an intelligent approach to therapy of these diseases.

252 E. Lovell Street

Report on New Deodorant for Hospital Use

By Philip N. Brown, M.D.
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HAVING BEEN for some years in an administrative position in state hospital work, the need for satisfactory deodorant preparations for use on the more disturbed units of the state hospital has been a frequent problem. The usually prescribed modes of deodorizing the untidy patients' rooms have been routinely ineffectual, merely masking or disguising the obnoxious odor with another odor which was more pleasing to the olfactory organs. These consisted of the use of preparations of pine oil and cresol disinfectants. The odors of these so-called deodorants are disagreeable to many people who would welcome a truly odorless deodorant.

Some months ago we were able to begin using a quaternary ammonium preparation with which we have had excellent results.†

This formula is a preparation, using two quaternaries, one of which is the major effective deodorizing agent; the second was used to increase the wetability and softness of the preparation, both of these being compounded with an inert vehicular agent. The preparation has no odor, is shipped in powdered form, goes into solution quickly, contains none of the metals, and is economical. When used in the advised strengths, we have found it extremely efficacious in completely eradicating the obnoxious odors in some of the more disturbed and untidy patients' quarters and in the toilets throughout the institution. This preparation, moreover, is practically non-toxic in the percentage used in the deodorizing solution. The preparation is definitely bacterio-static and bactericidal, the phenol coefficient of the major quaternary used being 410 against Staphylococcus aureus, 330 against Streptococcus pyogenes, and 200 against Streptococcus fecalis, these determinations made in ten minutes at 20 degrees Centigrade.

The excellent results obtained in the original work in deodorizing the rooms in the hospital caused us to feel that perhaps the preparation could be more widely used. After checking carefully the toxic properties of the preparation, the deodorizing formula has been used in a .025 of a 1 per cent solution in an atomizer on cantaminated wounds which had excessive odors, either by spraying the solution directly into the lesion or moistening the dressing with it. The preparation was extremely effective in the deodorizing of the few cases upon which it has been used, and in no case was there any evidence of toxic or irritative effect. We have used the preparation in chronic indolent ulcers which were secondarily infected, decubitus ulcers, in gangrenous lesions, and in advanced cases of carcinomatous ulcerations. In all of these cases, the odor was eradicated.

A third type of use which we have investigated was the use of the preparation in suitable strength on perineal pads, the pads being sprayed with the solution, then dried and used in the normal fashion. The preparation has also been extremely efficacious in this use in the female wards.

Additional investigation will be needed with regard to the use of the substance in wound dressings, but at the time of this report it is our opinion that this is a most valuable deodorant preparation, which is non-toxic and non-irritating in a percentage solution as advised and could readily be made use of in general hospitals as well as in mental institutions.

†This preparation is compounded by the Associated Laboratories, Incorporated, 315 N. Ashley Street, Ann Arbor, Michigan.

CERVICAL ARTERIOVENOUS FISTULAS

(Continued from Page 1197)

Summary

1. The results and complications encountered in a series of nine cervical arteriovenous fistulas are presented.

2. Improvement occurred in the majority of the cases and in no case were the presenting symptoms aggravated.

3. The cervical arteriovenous fistula is as yet in the experimental stage, but it may offer help in conditions that have been refractory to all forms of medical treatment.

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Why Nursing Education?

By Gertrude E. Nathe, R.N.
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THE MICHIGAN LEAGUE of Nursing Education works co-operatively with the other nursing, professional and educational organizations in the state in an effort to prepare the type of nurse who is qualified to meet the general health and illness needs of the public.

Criticism has been directed toward the nursing profession for its emphasis on "professional nursing." The term implies a better educational foundation for the preparation of today's nurses. The responsibilities of the nurse have changed and increased tremendously in the last decade. Nursing educators are making every effort to keep pace with the advances in medical science and social changes by planning programs which will prepare the nurse to give the type of intelligent nursing care required by the medical profession. Colleges and universities are better equipped to teach the physical, biological and social sciences than the hospital school. For years, many of the schools of nursing in Michigan have used the science departments of universities and colleges by having some or all of their sciences taught by these institutions. This plan relieves more of the nurse instructors for the very important clinical teaching positions in the hospital.

That nursing educators are interested only in "degrees" for nurses is a fallacy is evidenced by studying the enrollment of students in schools of nursing in Michigan. On May 24, 1950, there were 3,181 students enrolled, and of this number only 277 (8.7 per cent) were enrolled in degree programs at colleges or universities. Michigan schools of nursing will graduate 735 students this year, and approximately 4 per cent will receive the Bachelor of Science in Nursing. This degree does not qualify these young women to accept positions in teaching and administration. Depending on their basic preparation, some are qualified to accept first level positions in public health agencies and all are prepared to do staff nursing. Graduating from a collegiate school does mean that it will take the nurse less time to get the advanced preparation required for a degree in nursing education which will qualify her for teaching in schools of nursing, or for a position of responsibility in the field of supervision or administration.

The curriculum standards for professional schools of nursing in Michigan are set to meet the requirements of other states. It is only fair to the graduates of our schools to give them the basic curriculum required by the majority of states, so that following graduation and registration in Michigan they will be able to meet the requirements for registration in any state.

The nurses realize the need for an increased number of nursing personnel created by the additional number of hospital beds and the many positions open to graduate professional nurses. Every effort is being made to stimulate recruitment of young women to the professional and practical nurse schools. The efforts have been rewarded to the extent that there was a 5 per cent increase in enrollment in 1949. The number of female high school graduates entering schools of nursing has remained quite stable through the years, the ratio being 17 to 1. With approximatly 450 occupations open to women, recruitment to nursing is on a very competitive basis. High school graduates are better informed on the essentials of a good school of nursing and investigate several schools before deciding on the school of their choice. This means that schools of nursing must offer a good program if they want to attract good students.

In the annual renewals for licensure required by the Michigan law, some interesting data was collected by the Michigan Board of Registration of Nurses. Renewals as of April 1, 1950, totaled 27,071. Of this number 14,999 were not actively engaged in nursing for reasons such as retirement, illness, marriage and family. Out-of-state residence accounted for 5,270. Of the 13,072 actively engaged in nursing the majority were in the following types of nursing service:

	Type of Nursing Service	*Number*
1.	Hospital staff	5,880
2.	Private duty	1,574
3.	Office nursing	1,143
4.	Public health	827
5.	Industrial nursing	811
6.	Government service	475
7.	School of nursing	285
8.	Anesthesia	193
9.	X-ray or laboratory	50
10.	Other types of nursing	1,934
	Total	13,072

(Continued on Page 1214)

Miss Nathe is president of the Michigan League of Nursing Education.

Abruptio Placentae Occurring in Three Successive Pregnancies

Case Report

By William Byrne, M.D.
and
Cleary N. Swanson, M.D.
Detroit, Michigan

HAVING HAD a case of complete abruptio placentae occurring in the same individual in three successive pregnancies, we felt that this was so unusual that it should be reported. In looking through the literature, we found it to be reported only once and that by Meda[4] in 1929.

Complete separation of the normally implanted placenta is rare. Davis and McGee[1] found that in 40,000 confinements at the Chicago Lying-in Hospital there were only fifty-two cases of complete placental detachment. Kimbrough and Jones[3] found that in 28,288 deliveries at the Philadelphia Lying-in Hospital there were 113 cases of abruptio placentae in which there was clinical evidence of placental separation.

A brief summary of the case follows:

M. H. was twenty-nine years old, white, gravida IV, para II, with a past obstetrical history of two living children and one abortion at the third month of pregnancy. Her last menstrual period prior to the fourth pregnancy was May 15, 1943. Her prenatal course was uneventful, but on January 20, 1944, she started to bleed vaginally and to experience severe abdominal pain. Upon admission to the hospital her blood pressure was 70/50, the fetal heart was slow and irregular and there was no dilatation of the cervix. Blood was started immediately and the baby was delivered by classical cesarian section, at which time the diagnosis of complete abruptio placentae was confirmed. The Wassermann test was negative, as was the urinalysis, and subsequent kidney function tests were normal. The report of the pathologist was that the placenta showed no abnormalities. The baby never was in good condition, and it died two days later of atelectasis.

A year following the first section, she had a left salpingo-oöphorectomy and uterine suspension done by a general surgeon.

The patient's next pregnancy began in April, 1945. She had no difficulties during the early part of her pregnancy, but on October 25, 1946, she began to bleed vaginally. Upon admission to the hospital her blood pressure was 90/60 and she had a hard, tetanic uterus. No fetal heart could be heard. A classical cesarian section was performed and a stillborn infant was delivered. The preoperative diagnosis of abruptio placentae was verified at operation. The mother's postoperative course was uneventful.

The sixth pregnancy began April 28, 1949. No difficulty was encountered until September 14, 1949, when she commenced to bleed vaginally in small amounts. She was put to bed, and bleeding stopped after the first day. Her pregnancy continued without further mishap until November 12, 1949, when she experienced severe abdominal pain and vaginal bleeding. She was admitted to the hospital within an hour but her blood pressure had dropped to 70/50. Fetal heart could not be heard, the head was floating and there was no dilatation of the cervix. She was immediately given 1000 c.c. of whole blood and a low cervical cesarian section was done. The placenta was completely separated from the uterus and a stillborn male was delivered. The placenta again proved to be normal. Urine was negative. The patient was given 1500 c.c. of whole blood following the operation. Her condition rapidly improved and she was sent home from the hospital on the eighth postoperative day.

Discussion

The clinical diagnosis of premature placental separation was established by the following signs and symptoms, namely, occurrence of sudden severe abdominal pain, uterine tenderness due to concealed hemorrhage, and the presence of external bleeding with shock. The diagnosis of placenta praevia was excluded by the usual clinical methods.

The choice of treatment in cases of abruptio placentae is dependent upon several factors, chief among which are the severity of the symptoms, the general condition of the patient, whether or not the patient is in labor, and the degree of cervical dilatation. In dealing with the milder degrees of separation occurring in the course of labor, in which neither the mother nor the baby present evidence of distress, it is rarely necessary to interfere with the normal course of labor. On the other hand, the more urgent cases, because of extreme loss of blood and shock require that the uterus be emptied by the quickest method compatible with the safety to the mother. In all three instances our case falls into the latter category. In neither instance was the patient in labor and there was no effacement or dilatation of the cervix. We feel that cesarian section is the method of choice in complete abrutio placentae. In the case reported in the Italian literature, the method of delivery was by internal podalic version and

(Continued on Page 1237)

From the Department of Obstetrics and Gynecology, Mt. Carmel Mercy Hospital, Detroit, Michigan.

Quicksand

UNIONS are serving advance notice of high compensation and security demands, which they admit are unreasonable. To offset these demands the unions would like to freeze the medical care costs. If they could get enough doctor's signatures to set up a pattern, their medical plan would spread from plant to plant. This would not only freeze the medical profession's incomes in the face of inflation but would subject us to bargaining, in the future, with those who would inevitably try to reduce the original fee schedule. Even salaried people are moving to get salaries raised before any possible freeze can be enacted. Should we then bind ourselves to a compensation which may become totally inadequate? Bigger and more extensive social security will be enacted which will not affect us except that taxes will go up, interest rates will remain low and the struggle for existence will grow more difficult. We believe this is but the beginning of labor's effort to control all services and finances through men they will place in all high policy governmental agencies.

Year in and year out labor has received approximately 14.3 per cent of the value of the manufactured products sold. If the average compensation had been $1.29 an hour the past year, instead of $1.49 there would have been enough money available for labor so that 17 per cent who were idle could have been employed. Those who do the planning, however, receive good salaries and need not worry about unemployment. In fact, unemployment is attributed to many causes other than their own mismanagement, and the cost of unemployment is covered by unemployment insurance which must be paid by the thrifty taxpayer. Furthermore strikes and unemployment reduce the average income giving the unions a talking point when they ask for a frozen income on the part of the medical profession.

Mr. Harry Becker, director of the UAW-CIO Social Security Department, made the following statement in a speech entitled, "The Problem of Prepaid Medical Care." "Organized labor feels that the demand for health insurance should be met by a comprehensive national health program, including national health insurance, developed within the framework of our national health and social security policy." We in medicine would deplore a precipitous move in that direction. We believe all government controlled monopolies are expensive and poorly run. We challenge anyone to direct our attention to a well run efficient government bureaucracy other than the FBI. Even this department will deteriorate if interfered with by government agencies, politics, or labor. Is it any wonder, then, if we hesitate to align ourselves with an organization whose policies are so diametrically opposed to our own? No, we shall continue to work out the principles of prepaid medical services that are actuarily sound. This will be slower and not run the risk of entanglements which might lead to national insolvency. We believe allegiance to the surgical-medical insurance plan of the Hudson Motor Company's Workers or any other such plan could easily become a part of an overall scheme for National Health Insurance. We of the medical profession have offered labor management every opportunity to co-operate in working out adequate, available medical care. Their lack of co-operation would indicate, we believe, a lack of interest where the unions are not in sole control.

We do not object to any insurance plan the unions may attempt to work out. What we do object to is the contract and what it implies for the future. In answer to their objections raised to the Blue Cross and Blue Shield concerning charges in certain income brackets we offer the co-operation of our mediation committees, if satisfactory settlement cannot be arranged with the physicians concerned.

Low pay-roll incomes, offered as another reason for a frozen fee schedule, do not cover other sources of remunerations or total family compensation. Certainly any adjustment because of limited income on the part of the patient, should be brought about through the Doctor as in the past and he should get the credit for such adjustment. If concessions are made he and not the union should receive the credit.

It should be noted that while the UAW-CIO contract for the Hudson Motor Company workers was being distributed to the medical profession for signatures, new liberalizations were being added by the Michigan Medical Service. These answer in part some of the objections being raised by the unions charging incompleteness of coverage by Blue Cross and Blue Shield. The benefits shall not stop there, but will be added as fast as they can be proven actuarily sound. In this we seek the aid and co-operation of the unions.

There are many problems confronting the American people today that are more important than socializing medical care. For instance, we would like help in stopping inflation, and who could do more to stop spiraling prices and wages than the unions? We would like to take government out of private business. Why should the government try to control electric power, and make it another TVA losing enterprise, when private electric companies paid $450,000,000 in taxes last year. We realize that raises the taxes for every man, woman, and child by more than $3. We would like help in correcting the misnomer "Federal Aid" and have it properly cataloged in everyone's mind as "Federal Take." The Federal government takes much and returns little with lots of control. We would like to have our government admit that deficit spending is getting something for ourselves but charging it to our children.

We realize we cannot make first things first so will return to our original problem. The unions and medical profession are both interested in bringing the best medical care possible to those who labor. The unions apparently do not fear a strong centralized control or feel that they are big enough to direct statism, if it should materialize, to their own advantage. The medical profession believes in developing local government and preserving the rights of the individual. We will not bargain our freedom for any projected security. As long as there is a free America we will insist on protecting the rights of any minority group. Fundamentally, we cannot understand or condone many methods used in the union's so-called bargaining. Basically, we believe the unions fear statism as much as we do and here, if any, rests the hope of future successful planning for better health. Let us surmount this obstacle step by step and not slip off into the quicksand of socialism.

President's Message

C E Umphrey M D

President, Michigan State Medical Society

Editorial

SABOTAGE!

MICHIGAN MEDICAL Service was developed by officers and members of the Michigan State Medical Society as a pioneer effort to make available prepaid medical and surgical services for our patients. It has become an outstanding service corporation of great value to our patients and to ourselves. Nearly two million people are now receiving its benefits in our state, to the tune of more than a million dollars a month.

In 1942, our rates were inadequate and they had to be revised. Until this year (1950), benefits have been increased, but not the rates. During the past year or two the rate of usage of our service has increased rapidly. More people out of an average thousand are being hospitalized for medical and surgical attention. One severe criticism of the Blue Cross-Blue Shield program during all the years of its existence has been that it over-crowded hospitals and made beds unavailable for private patients. A careful study of hospitalization records shows that an increasing number of people are being hospitalized for conditions which could well be cared for in the home or doctor's office and also many for purely diagnostic procedures.

Michigan Medical Service has recently published a new listing of services for which it will pay if performed in the doctor's office rather than the hospital. Michigan Medical Service will render every just care to its subscribers, but believes many of the hospitalized cases are not its proper charges.

The commercial insurance companies, our competitors, have a "fine print clause" in their contract making certain limitations which they strictly enforce. They refuse payment for many services for which we must pay.

Increased usage is a liability that can be solved only by the doctors. Every patient whom we send to the hospital is presumably entitled to have his account paid under our program, even if purely diagnostic or routine office procedures are done.

Michigan Medical Service is our property. It belongs to the medical profession which organized it. It is our sheet anchor against the demand for compulsory health service. It is our proof that medical problems can be solved by medical men. If we sabotage our own property to the extent that we weaken its effectiveness we have not shown good judgment. We are committing sociologic and economic suicide!

Michigan Medical Service cannot continue its wonderful work if needless burdens are placed upon its facilities. We (the profession) own Michigan Medical Service. Many of us do not appreciate its value or usefulness. A prudent man always conserves his own resources.

DOCTORS' DRAFT!

THE CONGRESS has passed, and the President has signed a bill authorizing the drafting into the military services of men with certain attainments, and the age limit is fifty years. The bill, approved by organized medicine, was aimed especially at doctors and dentists. Never before in our history has the Government had to draft officers in its military departments.

The new draft law is especially aimed at the younger medical and dental men who received their training or part of it under ASTP and V-12 programs. In all, 31,176 were trained. Some failed to finish, some are physically handicapped, and some served from ninety days to twenty-one months. There are remaining 3,000 from ASTP and 2,613 from V-12, or 5,613 eligible to serve, with a medical requirement of 5,024.

The government has attempted to induce these men to volunteer, but after two months of effort about thirty doctors have entered service, one from ASTP. There must be some reason for this reluctance. A study and solution would have been advantageous, but the draft will serve the same purpose, without solving the difficulty.

We well remember what happened to the medical officers taken into military service during the last war. They were allowed to rust. Many never saw a patient for one to two years. Over 60,000 were called, making a shortage of doctors for civilian service, but a vast oversupply for the war work. This JOURNAL suggested early that the

government determine the number of doctors who would be needed, commission them and give them a short indoctrination, after which they could be sent home to their practice until needed. They could then be given a sufficient conditioning and sent to the places of need. But this was not done.

In World War I and World War II our doctors then were compelled to leave their practices, some of considerable magnitude, and serve for military pay. Our young men now are faced with the same condition. They are in their first years of practice and most making much more than the military offers, and they do not want their talents wasted as happened to the sixty thousand of World War II and 30,000 of World War I.

Assurance on these problems would have gone a long way to induce our young doctors to give back to the government some of the debt they owe.

CANCER OF THE LUNG

THE incidence of lung cancer is rapidly increasing. In Michigan in 1930, two deaths from cancer of the respiratory system were reported, both in males. In 1948, 772 such deaths were reported; 615 (80 per cent) in males, and 157 (20 per cent) in females. Cancer of the lung promises to equal or even surpass in a short time cancer of the stomach as the principal site of cancer in males.

Several reasons have been advanced for this rapid increase during the last twenty years. Improved diagnostic methods have shown that many cases of "atypical" tuberculosis, where no specific organisms could be found to explain the signs and symptoms, are in reality cancerous growths.

Smoking, particularly excessive or chain cigaret smoking, is strongly suspected of a close association with bronchogenic cancer. Wynder and Graham (J.A.M.A. p. 329, May 27, 1950), reporting on a study of 605 lung cancer patients, found more than 95 per cent "were moderately heavy to chain smokers for many years," and "the occurrence of carcinoma of the lung in a male nonsmoker or minimal smoker is a rare phenomenon (2.0 per cent)." Similar recent studies verify the above conclusions. The evidence against pipe and cigar smokers is not nearly as conclusive as that against cigaret smokers.

Inhalation of dust by miners of radioactive minerals has long been recognized as the cause of lung cancer in such workers. The carcinogenic properties of many new synthetic products used in industry are still to be determined. The preponderance of cases in males, the ratio being five or more males to one female, suggests other possible causative factors as yet undetermined.

As with many other types of internal cancer, the majority of lung cancers are in an advanced stage when first diagnosed. The earliest symptoms are so mild as seldom to arouse the suspicion of either the patient or physician. A slight cough and a slower than usual recovery from an upper respiratory infection are ignored although they may be the first warning signs, especially in a person past middle age. Hemoptysis, which seldom occurs in early cases, usually is the symptom that brings the patient and physician together. Auscultation may reveal a wheezing râle if partial bronchial obstruction has occurred. Slight irregular fever may be noticed for some time accompanied by increasing fatigue on exertion.

Patients with the above history and symptoms should be subjected to careful and thorough and, if necessary, repeated x-ray examinations of the chest. Their bronchial secretions also should be examined for typical cancer cells. Other diagnostic measures to be employed are bronchoscopy with biopsy wherever possible. Microscopic study of aspirated pleural fluid may be helpful at times.

Where conditions permit, all these procedures may be necessary to establish the diagnosis. Reliance should never be placed on but one of them. Should none of these examinations provide a satisfactory answer to the patient's continuing symptoms, exploratory thoracotomy may be necessary to clinch the diagnosis.

In differential diagnosis, benign tumors, pulmonary abscess, pneumonia and tuberculosis must always be kept in mind.

Pneumonectomy is the only treatment offering hope for cure. Lobectomy may suffice in favorable early cases. Since the first pneumonectomy by Evarts Graham in 1933—the patient, a physician, is still carrying on an active practice—surgical removal of the affected lung has become standard procedure whose operative mortality is such that no capable thoracic surgeon should hesitate to employ it, provided other conditions are favorable.

In the mass chest x-ray examinations for tuberculosis rests an excellent opportunity for finding many cancers of the lung long before the patient is aware of any trouble. In several reports of

large numbers of chest x-ray examinations, more neoplasms of all kinds than tuberculosis were found. Full co-operation of tuberculosis and cancer organizations in these mass surveys make special chest examination programs for cancer unnecessary. As several thousand routine chest examinations are required to find a case of lung cancer, the costs of such a program make a co-operative undertaking most desirable.

As with other types of cancer, the first physician consulted by the patient with respiratory symptoms must have the possibility of malignancy in mind. In one recently reported series of lung cancer there was a delay of eight months from onset of symptoms to diagnosis. Of this delay, three and one-half months, or 44 per cent, was due to the patient, while the physician was charged with the remaining four and one-half months, or 56 per cent, of the delay. The "major factor in the average doctor's delay in diagnosis was failure to think of cancer in the differential diagnosis." (Cancer, p. 752, July, 1950.)

In the interest of greater salvage from cancer of the lung, physicians should remember that its incidence is increasing more rapidly than any other form of cancer in males; that it is curable to a large extent when found in early stages; that, unfortunately in earliest stages, its signs and symptoms are so mild as to excite no suspicion of patient or physician in the majority of cases; that periodic chest x-rays may be necessary to establish the diagnosis; that cytological examination of sputum and bronchial secretions, along with biopsy, usually clinches the diagnosis; that pneumonectomy is the only treatment of curative value and then only in early stages; that every male patient, 40 years of age or older with indefinite lung symptoms, should be considered a cancer patient until proved otherwise.

HERE IT IS!

SOME MONTHS ago we reported that labor unions had advised their locals that County Medical Societies were competent bargaining organizations for the doctors and urging that bargaining talks be instituted to have doctors accept Michigan "Uniform Fee Schedule for Government Agencies" as payment in full for any service to be rendered, regardless of whether the Union member was "over income."

On August 29, 1950, Local 154, UAW-CIO sent a two-page letter to individual doctors in the Detroit Metropolitan area, and some other districts in the State giving a long argument and enclosing the following blank to be signed:

Date.....

Hudson Local Union No. 154, UAW-CIO
12101 Mack Avenue
Detroit 14, Michigan

Dear Sirs:

I am prepared to co-operate with the new Hudson Motor Car Company-UAW-CIO surgical-medical insurance program during the coming year (September 16, 1950-September 15, 1951) on the following basis:

1. I am willing to accept payment on the U. S. Veterans' Administration-Michigan State Medical Society fee schedule as full payment for surgical or in-hospital medical services which I may have occasion to render any insured Hudson worker who is now one of my patients or whom I accept as a patient.
2. If in future I feel I can no longer go along with this schedule as full payment, I shall notify you so that the Hudson workers may be informed accordingly.

Sincerely yours,

Signed, ..., M.D.

.....

(Please print name as signed)

Address .....

It is claimed that the first week produced 750 acceptances. We hope our members who are considering signing this pledge (which is a contract) will remember three things. First, the Union has ignored the one thing they demand for themselves —collective bargaining. If a small group of their own members signed such a contract they would be promptly disciplined. Second, the doctor who signs this contract places his well-being in the hands of labor union officials who have no loyalty or consideration for him. He is by implication promised the work of the employes of the Hudson Motor Car Company, in opposition to his colleague who fails to sign. If he should find himself discontented and wishes to withdraw for any reason, then he will be advertised broadcast to the potential patients. Third, the doctor's interests are between his patients and the insurance company, not a third party—the union.

Read again the last paragraph: *If in the future I feel I can no longer go along with this schedule as full payment, I shall notify you so that the Hudson workers may be informed accordingly.*

THINK IT OVER BEFORE SIGNING.

The early, curable malignant lesion of the pancreas is silent.

Michigan Foundation for Medical and Health Education

A Front-line of Defense

Poverty of knowledge has caused the fall of ideologies and nations. Ignorance and free circuses have made suckers, then paupers, finally slaves out of past civilizations. Something like that is now England's lot, in a medical sense.

The Michigan Foundation for Medical and Health Education was incorporated and dedicated five years ago "to acquire, provide, use, develop, endow, and finance methods, means and facilities for postgraduate education in medicine, for education in medicine, for lay health education, and for research, fellowships and scholarships."

Now, in 1950, the goals sought by the Foundation are constantly coming closer to attainment. Free contributions coming from doctors of medicine and laymen to the funds of the Foundation have permitted the expenditure of income for a number of progressive projects.

Rural Health

As more and more medical men enter the armed services of the United States, some areas in Michigan, particularly rural ones, find themselves with increasingly inadequate health protection and service. The Foundation has, as one of its purposes, the alleviation of such conditions through the "Fund for the Encouragement of Medical Practice in Rural Areas," offering loans and counsel to qualified upperclass medical students, interns, and residents who agree to practice in such regions. The Foundation, through its sponsorship of the annual Michigan Rural Health Conferences—this year on October 20-21 on the campus of Michigan State College—is assisting in determining medical requirements and health standards of suburban and rural Michigan. Also, the Foundation contributed, together with the Michigan State Medical Society, to the financing of a survey and research conducted by the Department of Sociology of Michigan State College to further ascertain rural medical needs in the State.

Medical Knowledge Means Good Health

To combat poverty of knowledge, to strengthen the state through education in health, the Foundation believes that constructive progress is best attained through voluntary efforts and contributions of progressive doctors of medicine and an informed laity. The recognized need for larger resources to carry out the objectives of the Foundation has never been greater than it is today. The first line of defense, top priority for an enduring United States, is a healthy population.

Contributions Deductible in Income Tax Computation

In his annual report to the trustees, E. I. Carr, M.D., who has been president of the Michigan Foundation for Medical and Health Education since its inception, pointed out that a ruling from the Treasury Department advises that inasmuch as the Foundation is "organized and operated exclusively for educational purposes" it is exempt from Federal Income Tax under the provisions of Section 101(6) of the Internal Revenue Code. Further, "*contributions made to the Foundation are deductible by the donors in arriving at their taxable net income.*" The Foundation offers an opportunity to give directly to an educational institution whose purpose is better health in Michigan. Furthermore, actual cash savings may be realized in income taxes payable by making contributions before the end of 1950.

Regular Contributions Popular

Many of those sympathetic with the Foundation's work—laymen as well as M.D.s—are giving specific modest amounts annually, semi-annually, quarterly, or monthly to continue and expand its effectiveness.

To advance the health and medical education purposes of the Foundation, the medical profession has joined with attorneys, trust officers, and other community-conscious members of society in contributing, and by suggesting the Foundation to others as a proper recipient of gifts and bequests. As in other things, these words apply to medical and health education: "Ye shall know the truth, and the truth shall make you free."

Contributors to the Foundation Fund

(To September 15, 1950)

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Wm. H. Parks, M.D., Petoskey; A. W. Petersohn, M.D., Battle Creek; R. C. Pochert, M.D., Owosso.

L. B. Rasmussen, M.D., Vicksburg; G. L. Renaud, M.D., Detroit; Lawrence Reynolds, M.D., Detroit; Meshel Rice, M.D., Detroit; J. M. Robb, M.D., Detroit; J. M. Robb, M.D., Detroit (memorial to the late J. D. Bruce, M.D.); Howard Robinson, M.D., Detroit; John Rodger, M.D., Bellaire; H. R. Rothman, M.D., Detroit; W. Z. Rundles, M.D., Flint.

G. B. Saltonstall, M.D., Charlevoix; Sanilac County Medical Society; C. A. Scheurer, M.D., Pigeon; Edna Schrich, M.D., Holland; R. J. Seime, M.D., Yipsilanti; G. W. Sippola, M.D., Detroit; E. F. Sladek, M.D., Traverse City; F. N. Smith, M.D., Grand Rapids; R. Earle Smith, M.D., Grand Rapids; St. Clair County Medical Society; Shiawassee County Medical Society; Ethelbert Spurrier, M.D., Detroit; W. J. Stapleton, Jr., M.D., Detroit; H. B. Steinbach, M.D., Detroit; Gabriel Steiner, M.D., Detroit; R. H. Stevens, M.D., Detroit*; R. A. Stiefel, M.D., Battle Creek; Elizabeth A. Stone, M.D., Romeo; C. L. Straith, M.D., Detroit; R. H. Strange, M.D., Mt. Pleasant.

R. E. Toms, M.D., Brooklyn, N. Y.

C. E. Umphrey, M.D., Detroit.

Jerrian VanDellen, M.D., East Jordan; E. E. Vivirski, M.D., Jackson.

Ralph Wadley, M.D., Lansing; R. W. Waggoner, M.D., Ann Arbor; R. V. Walker, M.D., Detroit; Washtenaw County Medical Society; H. B. Weaver, M.D., Greenville; H. L. Weitz, M.D., Traverse City; K. N. Wells, M.D., Spring Lake; C. G. Wencke, M.D., Battle Creek; E. L. Whitney, M.D., Detroit; Lt. Comm. Frances L. Willoughby, M.C., Traverse City; S. B. Winslow, M.D., Battle Creek; E. R. Witwer, M.D., Detroit*; Woman's Auxiliary to the Michigan State Medical Society; J. S. Wyman, M.D., Flint.

D. A. Young, M.D., Detroit.

Margaret H. Zalen, M.D., Kalamazoo; C. R. Zolliker, M.D., Imlay City.

*Deceased

WHY NURSING EDUCATION?

(Continued from Page 1206)

Nursing service requires varying degrees of knowledge and skill. Nursing education provides preparation for professional nurses and for practical nurses. In-service training programs for all nursing service personnel are essential if all groups are to work co-operatively to provide better nursing care. Nursing educators realize that providing good nursing care is a responsibility of the nursing profession. In order to provide total patient care, hospital administrators and members of the medical and nursing professions must plan and work co-operatively to accomplish this mutual goal.

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

The thirtieth annual Michigan Public Health Conference will be held in the Pantlind Hotel and Civic Auditorium, Grand Rapids, November 29 to December 1 and will consider "New Weapons in the Battle Against Disease" and the role of public health people in civil defense and in time of disaster.

Members of the Program Committee for the Conference include Dr. Virgil Slee, Chairman, Director of the Barry County Health Department and representatives of professional public health organizations.

Physicians interested are cordially invited to attend any of the Conference sessions. Copies of the Program may be obtained from the Michigan Department of Health.

* * *

A new film of interest to physicians has been added to the film loan library: "Breast Self-Examination," 15½ minute sound, color film produced by the American. Cancer Society, emphasizes the need for regular breast examination by every woman and illustrates in detail the technique of self-examination. The film is designed for adult women and is not intended for high school students.

* * *

Dr. F. S. Leeder, Director of the Division of Disease Control, Records and Statistics, was certified to the American Board of Preventive Medicine in Public Health in the Founders' Group.

* * *

The University of Wisconsin recently announced a new rodenticide, "Warfarin." This announcement states that the poison is slow acting and relies upon the accumulation of small quantities consumed over a period of days. This has a distinct advantage of protecting humans and pets from an overdose of the poison. Rats and mice, after taking the poison for several days, become drowsy and begin to walk with a slow and measured gait. They finally die from internal hemorrhage.

* * *

As a result of the analysis of dental data recently obtained from the Grand Rapids study on the effect of artificially fluoridating public water supplies for the partial control of dental decay, the Michigan Department of Health now recognizes the usefulness of this procedure.

While the evidence is not conclusive, due to the few years that the experiment has been conducted (since January, 1945), there is sufficient evidence to indicate that the treatment is beneficial. Dental decay experience of the five-, six-, and seven-year-old children of Grand Rapids, where 1 ppm of fluoride is added artifically to the water, compares favorably with that of the children of the same age groups in Aurora, Illinois, where the water naturally contains 1.2 ppm of fluoride. Thus, the Grand Rapids experiment partially aswers the question of whether artifically fluoridated water is as effective in reducing dental decay as water naturally containing fluoride. The study will be continued.

From the evidence available to date the Michigan Department of Health is now in a position to recommend the application of fluoride to public water supplies which are deficient in this element. Many water supplies in Michigan naturally contain some fluoride, but few contain it in sufficient amount to reduce dental decay.

Before a public water supply is treated with fluoride it is necessary that the Michigan Department of Health be informed. Approval of the local dental and medical professions is desirable.

* * *

Dr. Fanny H. Kenyon, associate chief, Section of Maternal and Child Health, has been appointed chairman of the Health and Safety Committee of the National Federation of Business and Professional Women's Clubs.

* * *

A total of 146 cases of animal rabies were reported in Michigan between January 1 and September 1, thirty of them in the past two months. The majority of the new cases are in the southeastern section of the state.

The Michigan Department of Health advises the immunization of all dogs; reporting and impounding of all stray animals; confining biting animals for ten days; and also advises those bitten by animals to see their physicians at once.

* * *

The divorce rate in Michigan has dropped one-half in the past three years, but in 1949 there was still one divorce for every 3.3 marriages in the state.

While 10.2 out of every thousand Michigan people were divorced in 1946, only 5.1 out of every thousand were divorced in 1949. Divorces, which declined from a peak of 29,158 in 1946 to 16,017 in 1948, were up to 16,274 in 1949.

Marriages continued a downward trend. In 1949, only 53,109 marriages were performed as compared to the peak of 78,808 in 1946.

* * *

Poliomyelitis cases have fallen to about a third of the number reported at this time last year. Based on the calendar year, there have been 583 cases of polio reported this year through September 1, compared with 1,570 for the same period last year.

* * *

Congenital syphilis in Michigan has not decreased at the rate of other forms of syphilis during the past decade. The Section of Maternal and Child Health and the Division of Venereal Disease Control are joining forces in an effort to reduce the incidence of venereal disease in the state. To accomplish the reduction will require the concerted effort of physicians, health officers, and nurses.

University of Michigan

Diagnostic Methods, Clinical and Laboratory Interpretation

University Hospital, Ann Arbor, Michigan

November 7-10, 1950, Inclusive

This program is designed to illustrate the application of clinical laboratory methods to clinical practice. Emphasis is placed on the selection, scope and interpretation of laboratory methods. The subject matter is presented for the practicing physician. Certain laboratory tests will be demonstrated.

TUESDAY, NOVEMBER 7

A.M.		
8:00- 9:00	Registration. Room 2040, University Hospital.	
9:00-10:00	Hematologic Methods.	Dr. Meyers
10:00-11:00	The Treatment of the Macrocytic and Iron Deficiency Anemias.	Dr. Sturgis
11:00-12:00	Blood Changes Associated with Infection.	Dr. Miller
12:00-12:30	Demonstration of Hematologic Techniques.	Staff
P.M.		
1:30- 2:30	Hodgkin's Disease and the Lymphomas. Therapy, including the Nitrogen Mustards.	Dr. Meyers
2:30- 3:30	Leukemia.	Dr. Bethell
3:30- 4:00	Demonstration. Bone Marrow Aspiration. Preparation of Material.	Dr. Bethell Miss Fritzell
4:00- 5:00	X-Ray Demonstration. Leukemia and Lymphoma.	Dr. Lampe

WEDNESDAY, NOVEMBER 8

A.M.		
9:00- 9:45	Infectious Mononucleosis. Clinical, Hematologic and Serologic Manifestations.	Dr. Zarafonetis
9:45-10:30	Blood Coagulation. Classification of Hemorrhagic Disease.	Dr. Mallery
10:30-11:30	Blood Types and Rh Factor Transfusions.	Dr. Meyers
11:30-12:30	Demonstration of Blood Typing, Cross matching Blood Bank and Transfusion Techniques.	Miss Marcos
P.M.		
1:30- 2:30	Anticoagulant Therapy, Heparin and Dicumarol.	Dr. Duff
2:30- 4:30	Syphilis: Spinal fluid and Blood Serology. Relation of Serology to Treatment.	Dr. Curtis
4:30- 5:00	Demonstration of Serologic Tests.	Dr. Kahn, Miss McDermott

THURSDAY, NOVEMBER 9

A.M.		
9:00-10:00	Infectious Disease. General Principles for Laboratory Diagnosis.	Dr. Braude
10:00-10:30	Demonstration: Blood Culture Techniques.	Dr. Braude, Miss Conner
10:30-12:00	Bacterial Infections: Specific Clinical and Laboratory Diagnostic Methods.	Dr. Braude
P.M.		
1:30- 2:30	Virus and Rickettsial Disease.	Dr. Zarafonetis
2:45- 3:45	Yeast, Molds, and Actinomycetes.	Dr. Cawley
3:45- 4:30	Parasitic Infections: Amoebiasis, Malaria and Intestinal Protozoa.	Dr. Mallery
4:30- 5:00	Demonstration.	Dr. Mallery

FRIDAY, NOVEMBER 10

A.M.		
9:00-10:00	Blood Biochemistry: Common Problems. Amylase, Lipase and Phosphatase Determinations.	Dr. Chandler
10:00-11:00	Carbohydrate Metabolism. Diabetes. Hypo- and Hyper-insulinism. Blood sugar and Tolerance Tests.	Dr. Bauer
11:15-12:30	Disorders of the Adrenal Gland.	Dr. Conn
P.M.		
1:30- 2:45	Disorders of the Thyroid and Parathyroid Basal Metabolism.	Dr. Beierwaltes
3:00- 4:00	Liver Function. Bilirubin Cycle.	Dr. Mallery
4:00- 5:00	Kidney Function. Blood urea, Creatinine, Clearance and Concentration Tests.	Dr. Newburgh

"A high percentage of cases of seasickness and carsickness can be aborted or prevented by suitable doses of dimenhydrinate (Dramamine)."

—Council on Pharmacy and Chemistry, New and Nonofficial Remedies, J.A.M.A. 143:815 (July 1) 1950.

DRAMAMINE® Brand of Dimenhydrinate—for the prevention or treatment of motion sickness—is supplied in 50 mg. tablets and in liquid form.

ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

RESEARCH IN THE SERVICE OF MEDICINE **SEARLE**

In Memoriam

Robert J. Beeby, M.D., of West Branch, Michigan, was born October 7, 1875, in Syracuse, New York, and was graduated from the Hahnemann Medical College and Hospital in 1905. He served as Chief of the Medical Staff at Kelly Field, Texas, during World War I, was a past president of the Medical Society of North Central Counties, a former member of the Michigan State Medical Society and the American Medical Association. Doctor Beeby had retired from active practice several years ago. He was seventy-four at the time of his death on March 1, 1950.

* * *

Frank W. Hannum, M.D., of Muskegon, Michigan, was born July 27, 1888, and was graduated from the Rush Medical College in 1914. He was a member of the Muskegon County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor Hannum had practiced medicine in Muskegon for thirty-three years. He died April 19, 1950, at the age of sixty-one.

Charles T. Eckerman, M.D., of Muskegon, Michigan, was born March 6, 1875, in Grand Rapids, Michigan, and was graduated from the Bennett College of Eclectic Medicine and Surgery in 1901. He was a member of the Muskegon County Medical Society, a life member of the Michigan State Medical Society and a member of the American Medical Association. Doctor Eckerman had practiced medicine in Muskegon since 1906 and had been Muskegon County Physician for twenty-three years. He died March 4, 1950, in Muskegon at the age of seventy-five years.

* * *

Franklin Wesley Sassaman, M.D., Charlotte, Michigan, was born at Edwardsburg, Michigan, in 1867, and was graduated from the University of Illinois Medical School in 1900. He was a former member of the Eaton County Medical Society, the Michigan State Medical Society and the American Medical Association. Doctor Sassaman died January 13, 1950, in Charlotte, Michigan, at the age of eighty-two.

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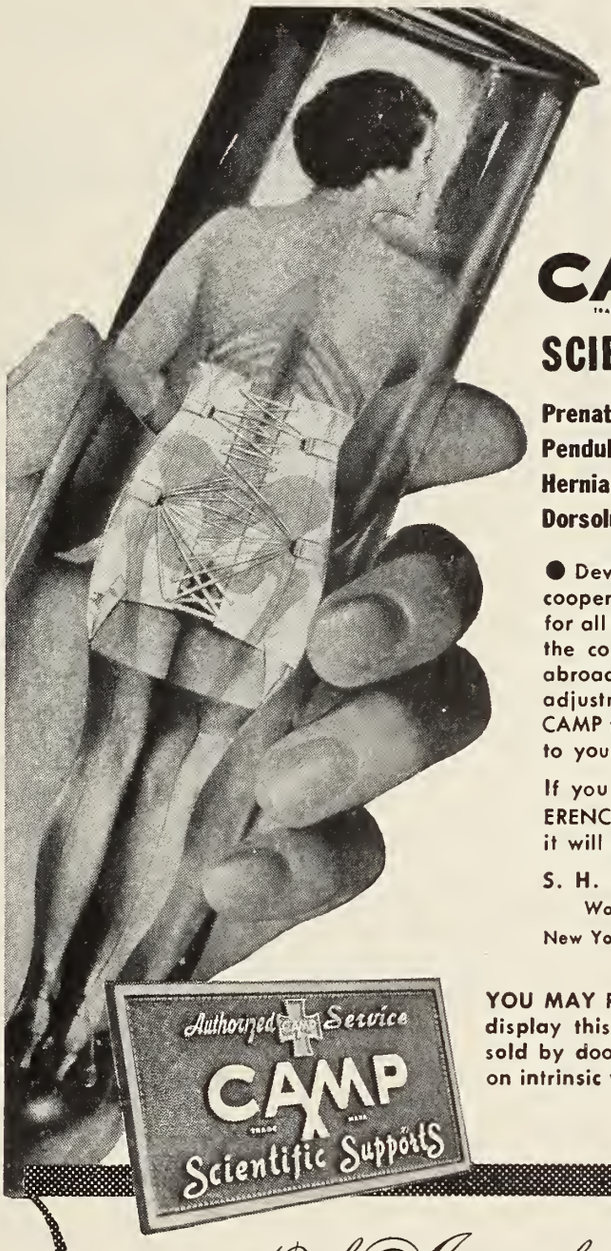

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OCTOBER 16-21

Communities throughout the nation are preparing to mark this important event in popular health education. A series of full color posters are nationally distributed in schools, colleges, factories, Y's, clinics, health centers and other institutions. These two heavily illustrated booklets have been widely accepted by physicians everywhere for distribution to their patients. Their titles are: "Blue Prints for Body Balance" and "The Human Back . . . its relationship to Posture and Health." Ask for samples or the quantity you need on your letterhead. Write to SAMUEL HIGBY CAMP INSTITUTE FOR BETTER POSTURE, Empire State Building, New York 1, N. Y. Founded by S. H. Camp and Company, Jackson, Mich.

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Based on the skin test for pregnancy developed at the Univ. of Illinois (Am. J. Obst. and Gynec., 41-431-1941). The Q-Test uses Ogle Micro-dispenser, facilitating intradermal injection of 1/50 cc. primiparous colostrum solution.

SPEED: Few seconds for intradermal injection; results apparent in 30 to 60 minutes.

ACCURACY: 97.7 per cent in recent clinical tests.

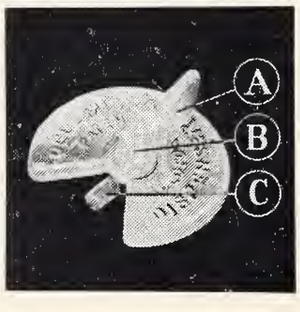
CONVENIENCE: The Q-Test is a complete unit requiring no other equipment, chemicals or bottles.

PATIENT REACTION: Enthusiastic, since results can be known at the first office visit.

ECONOMY: Cost considerably lower than pregnancy tests requiring laboratory analysis.

Easy to Use

Hold dispenser by its fin "A." Remove tip protector "C" from needle and place flat on flexor part of forearm as illustrated. Gently push dispenser forward until needle disappears under top layer of skin. Press bulb "B" firmly. Results apparent in 30 to 60 minutes.



Complete illustrated instructions enclosed with each Q-Test.

THE G. A. INGRAM COMPANY

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Communications

September 8, 1950

Dr. Wilfrid Haughey, Editor
610 Post Building
Battle Creek, Michigan

Dear Dr. Haughey:

It has frequently come to my attention that patient subscribers to Blue Shield and Blue Cross ask for and demand hospitalization for purely diagnostic purposes. As you know, this is not one of the benefits provided by either of these organizations.

During the last year, both Blue Cross and Blue Shield experienced unusually high rates of subscriber utilization and I am sure that some of this was due to the above stated reason, and excessive utilization has resulted in an increase in subscriber premium rates.

I believe that as Editor of the State JOURNAL, you could repeatedly call to the attention of our membership that Blue Shield is the Doctor's Company and that each and every one of us are stockholders in it, and as such we should be interested in doing all we can to keep our rates within reasonable limits that we can meet competition, which is becoming more keen all the time.

I know that it takes courage for the doctor to tell his patient that purely diagnostic procedures are not benefits under their contract with Blue Shield, but nevertheless such is the case and the patient should be told so.

Sincerely yours,
E. C. BAUMGARTEN, M.D.

* * *

HEADQUARTERS FIFTH ARMY
1660 East Hyde Park Blvd.
Chicago 15, Illinois
August 21, 1950

Dr. L. Fernald Foster, Secretary
Michigan State Medical Society
2020 Olds Tower
Lansing 8, Michigan

Dear Dr. Foster:

The Department of the Army has directed this headquarters to select Reserve officers of the Medical Corps for call to extended active duty in the very near future. Your State will be required to furnish a percentage of the quota allotted to Fifth Army.

To assure that no Reserve Officers are called to active duty who are essential to the health of the community and, further, to determine the correct status of those called, the co-operation of your society will be most helpful. The method to be employed in complying with the Department of the Army directive is indorsed by the American Medical Association.

The Department of the Army has stated that officers in the following categories will not be called presently:

a. Reserve medical officers who have not completed at least one year of intern training.

(Continued on Page 1222)

The

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The Vaculimb fits closely and accurately, producing a feeling of lightness, obviating the usual pumping action which causes irritation.

Action is instantly and accurately graduated in response to the degree of stump operation by the patient. A normal "feel" or reaction of the stump allows the patient to sense the degree of application or release necessary to locomotion.

The controlling force of the stump is rapidly transmitted to the Vaculimb, because of the close contact—no lost motion.

Cooperation with the medical profession, interested in the field of prosthetics, makes it possible to personalize each case. We welcome the opportunity to consult with the physician or hospital concerning further details of our specialized service.

BARDACH-SCHOENE COMPANY, INC. Certified manufacturers of the Vaculimb. Also various types of belt and below-knee limbs, arms, hands, hooks, and braces.

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(Continued from Page 1220)

b. Reserve medical officers who are senior residents prior to completion of the current year's training.
c. Reserve medical officers now pursuing a full-time postgraduate course of instruction in medicine, or in sciences allied to medicine at a college, university, or similar institution of higher learning, until completion of the current academic year of such training.
d. Reserve medical officers whose activity in teaching, research, and allied endeavors is considered necessary to the maintenance of the national health, safety, or interest.
e. Reserve medical officers residing in communities, the health of which would be unduly jeopardized if such officers were to be ordered to extended active duty.

The Chief of the Military District for your State will be directed by the Army Commander to submit to you from time to time names of Reserve medical officers residing in your State. It is requested that your society determine the status of each named officer in relation to the categories for deferment listed above, and return the lists to the Chief of the Military District at the earliest practicable date. Should an officer come under any of the categories for deferment, this fact should be specifically stated in your reply to the district headquarters.

For your information, Reserve medical officers who volunteer for extended active duty for at least 21 months under the present program prior to being ordered to duty will be entitled to the extra pay of $100.00 per month as provided for under Public Law 365, 80th Congress.

The Chief of the Military District must submit the list of names for the first quota to this headquarters by September 4, 1950. The shortness of time given us to select the first group may preclude your society from obtaining the help of other local societies in your State. We have been advised that there will be other calls and it is hoped that more time will be given you in your subsequent selections. Therefore, if you desire to assist us in selecting the present quota it may have to be accomplished at your level.

If your society does not desire to assist, or is incapable of assisting in this matter, please advise me as soon as possible.

Very truly yours,
(signed) E. W. Billick, Colonel,
Medical Corps, Army Surgeon

It is disclosed in the Hoover Report that the Executive Branch spends almost $50,000,000 a year for printing which is done by the Government Printing Office. . . . Yet, separate executive agencies also operate 389 printing or duplicating facilities of their own at an added cost of $25,000,000 a year. . . . Last year the amount of free mail sent out by the Government Printing Office at the expense of the taxpayers, much of it destined for wastebaskets, cost $75,000,000. . . . Included in the collection of pamphlets issued by the Government Printing Office in the past ten years are the following fascinating titles: "Methods of Catching and Killing Vagrant Cats"; "Fleas of North America"; "How to Tell the Sex of a Watermelon"; "Mist Netting for Birds in Japan"; "Habits, Food and Economic Status of the Band-Tailed Pigeon."—*AAPS News Letter,* April, 1950.

Say you saw it in the Journal of the Michigan State Medical Society

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Evidence obtained by direct-color photography shows that the cervix remains occluded for as long as ten hours after an application of "RAMSES"* Vaginal Jelly.

"RAMSES" Vaginal Jelly immobilizes sperm in the fastest time recognized under the authoritative Brown and Gamble method of measuring the spermatocidal power of vaginal jellies or creams. This has been established by repeated tests for spermatocidal activity conducted by an accredited independent laboratory.

Clinical observation of patients receiving daily applications of "RAMSES" Vaginal Jelly for three-week periods reveals no evidence of irritation or other untoward effect.

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ACTIVE INGREDIENTS: Dodecaethyleneglycol Monolaurate 5%, Boric Acid 1%, Alcohol 5%.

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. . . . . NEWS MEDICAL

Michigan Authors

J. H. Maxwell, M.D., Ann Arbor, published an article, "Acute Suppuration Frontal Sinus Intracranial Complications," in the *Annals of Otology, Rhinology and Laryngology,* June, 1950.

William S. Reveno, M.D., and **Herbert Rosenbaum, M.D.**, Detroit, published an article, "Tapazol Therapy In Hyperthyroidism," in *The Journal of the American Medical Association,* August 19, 1950.

E. H. Steffensen, M.D., J. A. Olson, M.D., R. R. Margolis, M.D., R. W. Smith, M.D., and **E. L. Whitney, M.D.**, of Detroit, published an article, "The Experimental Use of Cortisone in Inflammatory Eye Disease," in the *American Journal Ophthalmology,* July, 1950.

A. D. Ruedemann, M.D., Detroit, published an article, "Beta Radiation in Industrial Ophthalmology," in *Eye Digest,* Watson Gorley Eye Foundation, August, 1950.

Delmar F. Weaver, M.D., of Detroit, published an article, "Tumors of the Face," in the *Archives of Otolaryngology,* August, 1950.

The Symposium on Primary Chorioretinal Aberrations with Night Blindness—"Genetics" **Harold F. Falls, M.D.**, Ann Arbor, and "Treatment and Conclusions," by **F. Bruce Fralick, M.D.**, Ann Arbor—was published in the *Transactions of the American Academy of Ophthalmology and Otolaryngology,* July-August, 1950.

George L. Waldbott, M.D., Detroit, published an article, "Pollen Injections During Hay Fever Season," in *GP,* journal of The American Academy of General Practice, September, 1950.

Max R. Burnell, M.D., Detroit, published an article, "Selective Placement in Industry," in *The Journal of Medicine in Industry,* September, 1950.

Reed M. Nesbit, M.D., and **William C. Baum, M.D.**, of Ann Arbor, are authors of an original article entitled "Prostatic Carcinoma" which appeared in JAMA of August 12.

William S. Reveno, M.D., and **Herbert Rosenbaum, M.D.**, of Detroit, are authors of an original article entitled "Tapazol Therapy in Hyperthyroidism" which appeared in JAMA of August 19, 1950.

* * *

W. H. Huron, M.D., Iron Mountain, Michigan, former MSMS Councilor and a member of the AMA Legislative Committee, recently appeared before The Council of the State Medical Society of Wisconsin. Dr. Huron spoke to the group on August 16 in Madison and discussed "Legislation Affecting Medicine."

* * *

An MSMS Committee for the inspection of the Michigan State Veterans Facility at Grand Rapids (a state Institution) has been appointed, at the invitation of the Michigan Civil Service Commission. The personnel of the Committee is: R. J. Hubbell, M.D., Kalamazoo, Chairman; Ethan B. Cudney, M.D., Pontiac; Harvey C. Hansen, M.D., Battle Creek; C. A. Paukstis, M.D., Ludington; and R. W. Teed, M.D., Ann Arbor.

* * *

"Doctor Lucius A. Farnham Day" recently was celebrated by the Oakland County Medical Society which utilized an afternoon and evening scientific program, plus a banquet, to honor Dr. Farnham, who for many years has done yeoman service for the Oakland County Medical Society.

Congratulations, Doctor Farnham!

* * *

D. B. Ruskin, M.D., formerly Assistant Superintendent and Clinical Director of Caro State Hospital for Epileptics has opened an office in the Second National Bank Building, Saginaw, Michigan, for practice of Neurology and Psychiatry.

* * *

The American College of Chest Physicians is conducting an extensive Postgraduate Course on Diseases of the Chest, sponsored by the Council on Postgraduate Medical Education and the New York State Chapter of the American College of Chest Physicians at the Hotel New Yorker, November 13-18, 1950. The schedule of courses may be obtained from the American College of Chest Physicians, 500 N. Dearborn, Chicago 10, Illinois.

* * *

James W. Rae, Jr., M.D., Detroit, lead the course taught at the American Congress of Physical Medicine, on "The Clinical Use and Dangers of Microwave" on August 28, 1950, Statler Hotel, Boston.

* * *

M. K. Newman, M.D., Detroit, presented a paper at the American Congress of Physical Medicine, Statler Hotel, Boston, on August 29, 1950, entitled "Observations and Effects of Low Frequency Currents in Spastic and Hyperkinetic States."

* * *

AMA Committee Reports on British Health Service.—Conclusions of the five-man AMA Committee to Study Medical Care in England make it clear that the tremendously expensive experiment carried out under the National Health Act has degraded the practice of medicine and failed to improve the health of the British people.

The Board of Trustees last spring appointed five physicians qualified in internal medicine, surgery, pediatrics, general practice and industrial health to spend not less than six weeks in England, Wales and Scotland to in-

(Continued on Page 1226)

An Observation on the Accuracy of Digitalis Doses

Withering made this penetrating observation in his classic monograph on digitalis: "The more I saw of the great powers of this plant, the more it seemed necessary to bring the doses of it to the greatest possible accuracy."[1]

To achieve the greatest accuracy in dosage and at the same time to preserve the full activity of the leaf, the total cardioactive principles must be isolated from the plant in pure crystalline form so that doses can be based on the actual weight of the active constituents. This is, in fact, the method by which Digilanid® is made.

Digilanid contains all the *initial* glycosides from Digitalis lanata in crystalline form. It thus truly represents "the great powers of the plant" and brings "the doses of it to the greatest possible accuracy".

Clinical investigation has proved that Digilanid is "an effective cardioactive preparation, which has the advantages of purity, stability and accuracy as to dosage and therapeutic effect."[2]

Average dose for initiating treatment: 2 to 4 tablets of Digilanid daily until the desired therapeutic level is reached.
Average maintenance dose: 1 tablet daily.
Also available: Drops, Ampuls and Suppositories.

1. *Withering, W.:* An account of the Foxglove, London, 1785.
2. *Rimmerman, A. B.:* Digilanid and the Therapy of Congestive Heart Disease, Am. J. M. Sc. *209:* 33-41 (Jan.) 1945.

Literature giving further details about Digilanid and Physician's Trial Supply are available on request.

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(Continued from Page 1224)

quire into the workings of the National Health Act and its probable future effect.

The report of the committee, composed of Walter B. Martin of Norfolk, Va., member of the Board of Trustees, Grover C. Penberthy of Detroit, Heyworth N. Sanford of Chicago, Ulrich R. Bryner of Salt Lake City, and Carl M. Peterson of Chicago, secretary of the Council on Industrial Health, was made to the House of Delegates in San Francisco and appears in the August 19 issue of *The Journal of the American Medical Association.*

In the course of the study, the committee members interviewed officers of the British Medical Association, Ministry of Health, and Fellowship for Freedom in Medicine; staff members of medical schools and hospitals, and a large number of general practitioners and others concerned with carrying out provisions of the service.

In summary, their fine report yields these conclusions:

1. The total cost of the service has far outstripped all estimates, and there is no evidence that the peak has been passed.

2. Despite the great amount expended for medical care in England, there is no present evidence that it has in any significant way improved the health of the people, or added to their happiness. All general hospitals have long waiting lists, in some categories as long as six months to two years. Out-patient departments are bulging. Officers of general practitioners in industrial areas are overcrowded and their facilities are grossly inadequate. Funds available for medical care have been dissipated on services that are not essential and essential services have suffered.

3. The tendency of the present system is to degrade the general practitioner to the level of a clerk or a guidepost to the specialist.

4. The service has produced a greater inequality of distribution of doctors, in proportion to population, and has diluted the quality of medicine.

5. It has added nothing to preventive medicine, but has disrupted public health work and produced serious problems in tuberculosis control and preventive dentistry.

6. It has created an almost complete autocratic control of medicine through concentration of financial power in the central government and the authority given the Minister of Health to govern by directions having the weight of law.

7. Abuses of the service are evident everywhere and must lead to more regulations, tighter enforcement, further limitations on freedom and further deterioration of the quality of medicine.

* * *

Army Points Toward More Efficient Use of Medical Personnel.—In an attempt to cut down on the number of reserves to be called, Army is reducing its *non-military patient load,* recruiting more *civilian* physicians and putting more *efficient* policies into effect. One step is the decision not to accept more VA patients in Army hospitals, a restriction which will be extended to Navy hospitals in the near future. Another is an appeal to civilian physicians to accept contracts for nonmilitary

(Continued on Page 1228)

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(Continued from Page 1226)

duty in Japan and Okinawa, at salaries ranging from $6,400 to $11,000. Army is also refusing to accept reserve volunteers for one year of active duty, and *requiring them to agree to 21 months.* More important for men who are or will be in service, Army has laid down new rules which it hopes will prevent waste of military manpower in preliminary stages of mobilization. Two examples: Although an infantry division is authorized 42 physicians, only 17 will be retained by it during training period; remainder will be assigned to hospital serving the division for this period. In the case of 1,000-bed general hospital, only three physicians and two nurses will initially be called; balance will stay in civilian life until receipt of warning orders for hospital's deployment.

* * *

Doctors Use New Drug Against Toxic Goiter.—Promising results in treating patients for toxic goiter with a new synthetic drug, tapazol, are reported by two doctors from Wayne University College of Medicine, Detroit.

These findings should be considered preliminary. The drug has been used in only eighteen patients and observations have covered only a six-month period, Drs. William S. Reveno and Herbert Rosenbaum say in the August 19, 1950, *Journal of the American Medical Association.*

Tapazol is not now generally available to doctors. Its use is limited to experimental studies.

The drug is an antithyroid compound with action twenty-five times as powerful as propylthiouracil, a compound commonly used in treating overactivity of the thyroid gland. Abatement of symptoms occurred in patients with toxic goiter variously five, six and eight weeks after administration of tapazol was begun, according to the article. Two patients who had relapsed after treatment with propylthiouracil were relieved after fifty-seven and fifty-one days of treatment with tapazol, respectively.

"In the small group of patients observed, tapazol exhibited effective antithyroid activity closely resembling that of propylthiouracil but with a potency approximately twenty-five times greater," the doctor say, adding:

"Toxic reactions were not encountered, but more time and treatment of a larger number of patients will be required for assessment of this highly important factor."

* * *

Veterans Administration announced that 6 new hospitals opened their doors to veteran-patients in September, setting a new record for activation of V-A installations.

Totaling 1,450 beds, the hospitals are located in *Saginaw, Michigan;* Marlin, Texas; Grand Island, Nebraska; Spokane, Washington; Shreveport, Louisiana, and Altoona, Pennsylvania.

The new hospital beds come at a time when they're particularly needed, V-A said.

Recently, at the request of the Department of Defense, V-A stopped admissions of veterans to all Army hospitals within the United States, except for emergencies. The move, it was explained, was caused by the Army's

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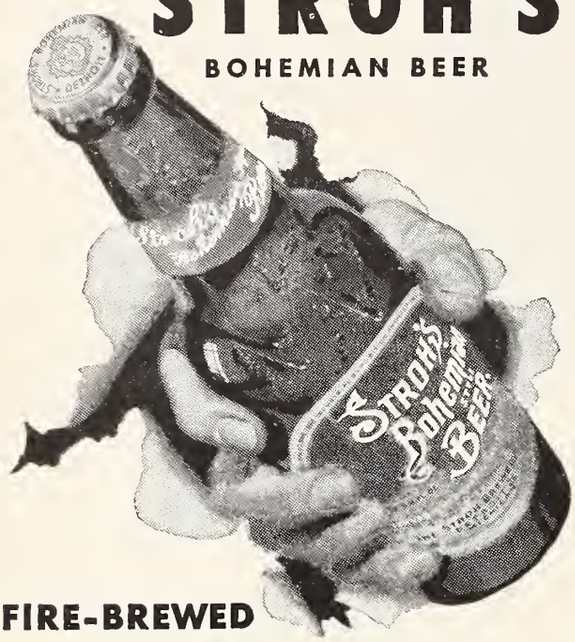

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(Continued from Page 1228)

need for more hospital beds due to the Korean situation.

The six new hospitals represent half of the dozen hospitals V-A expects to open before the end of the year. The remainder have a total of 2,075 beds.

The 200-bed Saginaw hospital admitted its first patients on August 28, and was dedicated on September 3.

Clinics in the five-story main hospital building include six examining rooms, a pharmacy, dental unit, x-ray department, general laboratory, orthopedic brace shop and facilities for medical rehabilitation. The operating suite contains two major and two minor operating rooms.

* * *

The Fourth Clinical Session of the American Medical Association, designed primarily for the general practitioner, will be held in Cleveland, December 5-8.

The scientific sessions and the scientific and technical exhibits will be presented in the Cleveland Municipal Auditorium. Meetings of the House of Delegates will be held in the Statler Hotel. These sessions of the body elected to govern the affairs of the AMA are attracting more and more nondelegate physicians each year.

Outstanding clinical teachers with recognized ability as speakers will headline the scientific demonstrations. Actual cases will be presented and discussed. Diagnoses, treatment and preventive measures as they fit into daily practice will receive the greatest attention.

Each clinical session will be limited to an attendance of 100 physicians. These small groups will make it possible for the general practitioner to enter actively into the discussion and to inquire about his own cases. Leading men in each of the fields under discussion will be available to help with the problems presented.

Outstanding features of the scientific exhibits will be special demonstrations on fractures, diabetes, rheumatism and arthritis. Exhibits will be presented on cancer, pediatrics, chest diseases, surgical procedures and other subjects correlated with the clinical presentations.

Once again color television will take its place on the program. A schedule of surgery, clinical treatment and examination will be telecast from the Western Reserve School of Medicine to the auditorium. It will be sponsored by Smith, Kline & French Laboratories.

The annual General Practitioner Award has come to be regarded as one of medicine's highest honors and a definite step toward increasing the recognition of the family doctor. This year's selection will be made at the Cleveland meeting.

The steadily climbing registration of general practitioners at the clinical sessions and the comments of those participating indicate these meetings are valuable means of keeping abreast of developments in medicine. It is hoped that a record number of physicians will take advantage of the opportunity in December to attend. The program has been designed with that in mind.

* * *

More than 60,000 doctors threatened Thursday to quit Britain's national health service because of government

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delay in acting on their demands for higher pay. Doctors at the conference stamped their feet in noisy approval when a London physician described the health service as likely to become "the most costly and complete fiasco our social history has ever seen."—*Chicago Daily News*, July 13, 1950.

Routine admission x-rays in general hospitals are a highly effective way to find unsuspected cases of tuberculosis as well as other unsuspected abnormalities.

The University of Michigan Hospital during seven years of admissions surveys found that 9.4 per cent of individuals admitted required more extensive chest examinations. This is more than three times the rate of findings in Michigan's two most extensive mass surveys of general population groups—in the Copper Country and Calhoun County—where only 2.86 per cent of the number x-rayed were recommended for further examination.

The University of Michigan survey also found that 1.28 per cent of all admissions showed some form of *active tuberculosis!*

Michigan Tuberculosis Association

Venereal Disease Control Program.—To help offset the loss of the Rapid Treatment Center in Ann Arbor, the State Division of Venereal Disease Control has revamped its program, and members of the State Health Department are making a tour of all the local health departments to assist in expansion and correlation of local programs. The revamped venereal disease control program calls for assisting local health departments in intensified education programs, making available to local health departments venereal disease investigators to assist in contacting and follow-up, providing for the services of private consultants who are specialists in syphilology and dermatology for diagnosis of problem cases, and the distribution of penicillin to local health departments for use in clinics and to private physicians, upon request.—JAMA, August 19, 1950.

* * *

The Radiological Society of North America will hold its 36th Annual Meeting in Chicago, December 10-15, at the Palmer House. For program, write Warren W. Furey, M.D., 104 S. Michigan Blvd., Chicago, Illinois.

* * *

The Diabetes Drive this year, sponsored by the American Diabetes Association, Inc., is scheduled for November 12-18. This Diabetes Detection Drive provides doctors of medicine a means whereby the hidden diabetics among their patients can be discovered, treated, and retained on their jobs improved in health, happiness, and working efficiency.

Last year's DDD uncovered approximately 7,500 hidden diabetics throughout the country. It is anticipated

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that this year's campaign, with the new approval of self-testing by the AMA and with much wider co-operation by business and industry in the Drive, will greatly improve last year's exceptionally fine record.

Doctor, help in this year's DDD.

For further information, write the American Diabetes Association, 11 West 42nd St., N. Y. C. Talks for speakers are available upon request.

* * *

The American Goiter Association again offers the Van Meter Prize Award of three hundred dollars and two honorable mentions for the best essays submitted concerning original work on problems related to the thyroid gland. The Award will be made at the Annual Meeting of the Association in Columbus, Ohio, May 24-26, 1951. Essays shall be received not later than March 1 and are to be sent in duplicate to George C. Shivers, M.D., Secretary, 100 E. Saint Vrain St., Colorado Springs, Colorado.

* * *

AT AMA IN SAN FRANCISCO

Michigan M.D.s who registered at the AMA Session in June, 1950, included:

Sunday Registrations.—James Barron, Detroit; John G. Bielawski, Detroit; Alexander Blain, Detroit; Lloyd Campbell, Saginaw; W. P. Chester, Detroit; Schuyler O. Cotton, Detroit; Edward C. Dale, Detroit; Charles F. Dodenhoff, Detroit; Dwight C. Ensign, Detroit; William L. Foster, Detroit; Mary Margaret Frazer, Detroit; Edmund J. Knobloch, Detroit; Manual Levin, Ann Arbor; Ezra Lipkin, Detroit; Daniel B. Marcus, Detroit; R. Ralph Margulis, Detroit; Lyman M. McBryde, Sault Ste. Marie; G. Thomas McKean, Detroit; Don W. McLean, Detroit; Richmond Watson Smith, Jr., Detroit; Max Steiner, Detroit; Joseph A. Witter, Detroit; C. J. Williams, Grosse Pointe.

Monday Registrations.—Marshall W. Alcorn, Bay City; Herbert C. Allison, Grosse Pointe; Arnold R. Axelrod, Detroit; Paul S. Barker, Ann Arbor; E. A. Bicknell, Detroit; Paul R. Boothby, Lawrence; Wallace Borgman, Kalamazoo; D. S. Brachman, Detroit; G. Rex Bullen, Jackson; Earl L. Burbidge, Kalamazoo; Max R. Burnell, Detroit; Robert W. Buxton, Ann Arbor; C. D. Chapin, Columbiaville; Wyman C. C. Cole, Detroit; C. Corley, Jackson; Clarence E. Crook, Ann Arbor; Leon DeVel, Grand Rapids; F. D. Dodrill, Detroit; Carleton Dean, Lansing; Stewart G. Delbert, Kalamazoo; Hardie B. Elliott, Flint; H. F. Falls, Ann Arbor; Wilfrid Haughey, Battle Creek; E. C. Vonder Heide, Detroit; Harold B. Hogue, Ewen; W. L. Howard, Northville; Willard B. Howes, Detroit; William A. Hudson, Detroit; Lloyd T. Iseri, Detroit; Reuben L. Kahn, D.Sc., Ann Arbor; D. H. Kaump, Detroit; Louis LeFevre, Muskegon; John T. Manwaring, Detroit; Joseph M. Markel, Dearborn; J. Harvey Maxwell, Detroit; Carey P. McCord, Detroit; Ralph H. Meng, Rochester; Michael R. Murphy, Cadillac; William A. Murray, Detroit; A. H. Naylor, Detroit; Grant L. Otis, Jackson; Carl A. Peterson, Hillsdale; Jean Paul Pratt, Detroit; Lawrence A. Pratt, Detroit; Alan Raftery, Detroit; Julius Mott Rawlings, Flint; Maurice L. Richardson, Lansing; Albert D. Ruedemann,

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Tuesday Registrations.—Vernon C. Abbott, Pontiac; Warren W. Babcock, Detroit; Carl E. Badgley, Ann Arbor; Leo H. Bartemeier, Detroit; Ord C. Blackledge, Detroit; Margaret Bell, Ann Arbor; Donald R. Brasie, Flint; W. A. Chipman, Detroit; W. B. Cooksey, Detroit; Harold D. Crane, Grand Rapids; Henry F. Crossen, Detroit; Arthur C. Curtis, Ann Arbor; Ben P. Dorniak, Detroit; Cornelius E. Dunn, Detroit; G. R. Fattic, Jr., Niles; John P. Flanders, Monroe; Herbert B. Gaston, Detroit; Jacques P. Gray, Detroit; H. F. Grover, Flint; E. S. Gurdjian, Detroit; Hilda A. Habenicht, Jackson; R. F. Hague, Flint; H. W. Harris, Lansing; John E. Hauser, Detroit; Alvin R. Hufford, Grand Rapids; Archie E. Humphrey, Marshall; W. O. Jennings, Kalamazoo; Charles G. Johnston, Detroit; Edgar C. Long, Monroe; James H. Lyons, Eloise; W. G. Mackersie, Detroit; C. P. Mehas, Pontiac; L. N. Meleyco, Detroit; Sophie Mishelevich, Detroit; Robert J. Morrow, Lansing; J. A. McGarvah, Detroit; James A. Olson, Detroit; Alice E. Palmer, Detroit; Frank Scott Perkin, Detroit; B. H. Priborsky, Detroit; Herbert F. Robb, Belleville; David J. Sandweiss, Detroit; William James Sinclair, Detroit; Ellen Smith, Birmingham; James R. Stein, Ferndale; Homer H. Stryker, Kalamazoo; Cyrus C. Sturgis, Ann Arbor; Donald G. Trapp, Hillsdale; Clayton E. Wheeler, Jr., Ann Arbor; Thomas Wilensky, Lansing; Edwin M. Williamson, Kalamazoo; D. R. Wright, Flint.

Wednesday Registrations.—DeWitt C. Adams, Caro; R. M. Atchison, Northville; William C. Baum, Ann Arbor; Colin Beaton, Detroit; W. Clarence Beets, Grand Rapids; James C. Breneman, Galesburg; Charles W. Burt, Detroit; Emilie Arnold Clarke, Lansing; James A. Ferguson, Grand Rapids; Ward S. Ferguson, Grand Rapids; Edward J. Levitt, Detroit; E. F. Lewis, Jackson; Max M. Mosen, Detroit; Nathan H. Moss, Detroit; John J. O'Donnell, Detroit; H. Marvin Pollard, Ann Arbor; Leo B. Rasmussen, Vicksburg; John B. Rieger, Detroit; Mary H. Rieger, Detroit; Emil D. Rothman, Detroit; Peter G. Shifrin, Detroit; Henry Small, Detroit; Fred R. Smith, Lake City; Thomas O. Stewart, Detroit; George Van Rhee, Detroit; Oliver Lohr, Saginaw.

Thursday Registration.—William P. Marshall, Kalamazoo; Donald J. Murphy, Detroit; Garrett E. Winter, Grand Rapids; Edward A. Wishropp, Detroit.

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Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

TECHNIQUES IN BRITISH SURGERY: Edited by Rodney Maingot, FRCS. Illustrated. 734 pages with 473 figures. Philadelphia and London: W. B. Saunders Co., 1950. Price $15.00.

Rodney Maingot in collaboration with twenty-nine leading surgeons of Great Britain has produced a book on technique in surgery that without a doubt is illustrative of British surgery as it is today. The inclusion of techniques in general surgery as well as speciality surgery in one volume has necessarily limited the number of procedures that could be discussed in detail, but this in no way decreases the desirability of making this volume a part of the surgeon's library. The resident in training the speciality surgeon and the general surgeon all will find this book helpful. It will be especially useful as a reference.

ANNUAL REPRINT OF THE REPORTS OF THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE AMERICAN MEDICAL ASSOCIATION. With the comments that have appeared in the Journal of the American Medical Association. Philadelphia: J. B. Lippincott Co., 1949.

NEW AND NONOFFICIAL REMEDIES. Containing descriptions of the Articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on January 1, 1950. Issued under the Direction and Supervision of The Council of Pharmacy and Chemistry, American Medical Association. Philadelphia: J. B. Lippincott Co., 1950. Price, $3.00.

THE MASK OF SANITY An Attempt To Clarify Some Issues About the So-Called Psychopathic Personality. Non teneas aurum totum quod splendet ut aurum. Alanus de Insulis. By Hervey Cleckley, M.D., Professor of Psychiatry and Neurology, University of Georgia School of Medicine, Augusta, Georgia. Second Edition. St. Louis: C. V. Mosby Co., 1950. Price $6.50.

After reviewing this book, one is left with the decision that it is both a good and a poor book. It is good inasmuch as it presents many illustrative case reports, all the characteristic features of the disorder and including the author's belief that the disordered personality is the result of a lack in the patient's early family environment. He suggests for these persons an indefinite confinement.

The author has extensively studied literature on the subject. There is a long list of references even including excerpts from poets and dramatists. Consequently the book seems much longer than necessary. The case material could more extensively be abstracted with only a deletion of the decorations. There is much repetition that lends to tediousness. He follows the style of many authors with the argumentative presentation, that frequently leads to a blind alley.

It is the reviewer's belief that were the book condensed, it would be more interesting and equally as valuable.

G.K.S.

SAINTS, SINNERS and PSYCHIATRY By Camilla M. Anderson, M.D., Assistant Clinical Professor of Psychiatry, University of Utah. Philadelphia: J. B. Lippincott Company, 1950. Price, $2.95.

This book is a highly readable addition to that growing shelf of literature which attempts to clarify the dynamics of human behavior. Both concepts and terminology have been simplified. Dr. Anderson achieves her

aim, as expressed in the preface, of developing the theory of behavior in "clear, simple, practical language which can find its way into the everyday lives and everyday language of everyday people." Case histories aptly illustrate the concepts developed. The author believes that Psychiatry should be removed from the fantastic to the familiar. Then "preventive medicine in psychiatry will have taken its place alongside other branches of preventive medicine which are helping to make life more satisfactory."

Probably each person reading the book through, an accomplishment not difficult nor unpleasant, will make a mental list of friends who SHOULD read it. This should please both Dr. Anderson and her publisher.

ESSENTIALS OF MEDICINE, The Basis of Nursing Care. Charles Phillips Emerson, Jr., A.B., M.D. Associate Professor of Medicine, Boston University School of Medicine; Member, Robert Dawson Evans Memorial Laboratory; Visiting Physician and Physician in Charge of Clinical Laboratories, Massachusetts Memorial Hospitals; Attending Physician, Cushing Veterans Administration Hospital and Medical Consultant, American Red Cross. Jane Elizabeth Taylor, R.N., B.S., M.Ed. Lecturer, Frances Payne Bolton School of Nursing, Western Reserve University; Formerly Nursing Education Consultant, U.S. Public Health Service; Formerly Assistant Professor of Medical Nursing, Yale University School of Nursing, and Assistant in Charge of Medical Nursing, New Haven Hospital. Sixteenth Edition, Revised and Reset, 191 Illustrations, Including 5 Subjects in Full Color. Philadelphia: J. B. Lippincott Co., 1950. Price $4.00.

Presentation of the essential information required for teaching and training nurses is the purpose of the author. They have produced a complete text which is most valuable and we predict will become standard in our progress of Nurse training. The book is exact, concise, well but simply illustrated, and will prove most helpful.

POSTGRADUATE GASTROENTEROLOGY—As Presented in a Course Given Under The Sponsorship of The American College of Physicians in Philadelphia, December MCMXLVIII: Edited by Henry L. Bockus, M.D., Professor of Gastroenterology, University of Pennsylvania Graduate School of Medicine. 670 pages with 258 figures. Philadelphia and London: W. B. Saunders Company, 1950. Price $10.00.

Although this text provides a fairly complete review of much of the field of gastroenterology in outline form, most attention is given to recent advances, new medications, and an evaluation of new theories. The material was originally presented by fifty-three lecturers to members of the American College of Physicians as a postgraduate course of one week's duration. Thus there is a question-and-answer period to conclude each topic, and the subject matter is well illustrated by clinical cases. There are excellent x-ray plates to demonstrate various clinical entities in almost every chapter.

The physiology of gastric secretion, tests of gastric function, effects of Dibutoline on secretion, and study of aspirated cells is an important section. The handling of benign and malignant gastric tumors is fully discussed by internists and surgeons, stressing recent surgical advances. Peptic ulcer is given considerable space, with results of the use of enterogastrone and urogastrone, an appraisal of the effects and results of vagotomy, protein therapy in medical management of peptic ulcer, and a discussion of the postoperative dumping syndrome. The psychosomatic aspects of gastrointestinal disorders are reviewed by the internist, physiologist and neuropsychiatrist.

A symposium on secondary gastrointestinal disorders deals with abdominal symptoms of allergic origin and of

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endocrinal origin, and there is a fine section on pancreatic physiology, pancreatitis and pancreatic tumors. Recent measures, medical and surgical, which have been developed to relieve pancreatic pain are presented.

Tests of liver function, differential diagnosis of jaundice, medical and surgical treatment of disease of the liver and gall bladder are reviewed, including a section on indications for and results of surgical procedures in portal hypertension. Other chapters appraise the diagnosis and medical and surgical treatment of nonspecific enteritis and enterocolitis, intestinal obstruction (with a good review of water and electrolyte balance problems), the so-called post-cholecystectomy syndrome, chronic ulcerative colitis (including Doctor Wangensteen's experience with vagotomy) and carcinoma of the colon.

This book is not intended to serve as a reference for those who seek detailed information on all aspects of gastroenterology, but certainly can be enthusiastically recommended to the physician who wants readily available information on recent medical advances and therapy. It is easy to read, and in a very short time it is possible to review the opinion of several medical and surgical experts on any one phase of gastroenterology.

S.B.W.

It is important to remember that 75 per cent of all malignancies involving the intestinal tract, exclusive of the stomach, are at or below the rectosigmoid junction and can be felt on careful digital examination.

THE JOURNAL
of the Michigan State Medical Society

VOLUME 49 NOVEMBER, 1950 NUMBER 11

Contributors to this Issue

EUGENE A. HAND, M.D.

A. RAY HUFFORD, M.D.

WILLIAM F. MENGERT, M.D.

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PROCUREMENT AND ASSIGNMENT

Calling Up Reserve Officers

A new set of priorities was issued by the Defense Department in late September, 1950. Reservists are to be called in the following order:

First Priority: Medical reserve officers who received all or part of their professional education in ASTP or V-12 and who have had no military service as medical officers.

Second Priority: Those who participated in ASTP or V-12 programs and who have had subsequent military service, with those having the least service to be called first.

Third Priority: All other reserve officers, also to be called in relation to their past military service.

It was emphasized that reserves with special skills may be called in spite of these categories.

Substantially, all of the first group will be ordered to active duty before calls are made for other classifications. This priority system does not apply to physicians in organized reserve units; they will be called with their units. Please note that *this system applies to reserves only and not to draft registrants.* No more veterans will be called than are absolutely essential. This is possible, now that the doctor-draft law is on the books as the Army has decided it can hold back on its medical staffing until younger, non-veteran doctors join the reserves as the result of the draft pressure. Commanders have been urged to use non-veterans if they are available, although they are free to call on older reservists to fill their *second* quota.

Navy to Call Reserve Medical Officers

The Department of the Navy was directed on September 29 to order to active duty enough V-12 trained Navy Reserve medical officers without prior service to meet requirements for all three military departments. These medical officers will be assigned to duty with the Army and Air Force to meet their needs. The first increment is required to be on duty at designated stations by October 15, 1950.

The first priority group includes medical reserve officers, other than members of Organized Reserve units, who participated in the ASTP or V-12 training programs of the Army and Navy and who have had no subsequent military service as medical officers.

The second priority group includes ASTP and V-12 participants who served as military medical officers after completion of training.

The third and final priority group includes all other reservists.

Of the 1429 Navy Reserve medical officers in priority group one, some 1350 are available for immediate call to active duty. The remainder are members of Organized Reserve units not subject to call at this time.

Draft Registration

Only the first group or priority must register now (those M.D.'s educated by government and those deferred to study medicine). PLEASE ADVISE YOUR MEMBERSHIP AT ONCE, BY LETTER, THAT THESE M.D.'s SHOULD GET RESERVE COMMISSIONS NOW AND NOT BE FORCED TO BE INDUCTED INTO THE ARMY AS A *PRIVATE WITHOUT BONUS.*

It is definitely to the advantage of the individual doctor of medicine (and the entire medical profession) to co-operate. The Defense Department is being most fair in seeking the advice of the Office of Medical Services (and of state and county Medical Procurement Advisory Committees) to control the flow of medical officers into the three military services. Seeking the advice of civilian groups is an innovation in military circles, and this consultation system must be encouraged and maintained by the active, enthusiastic co-operation of county and state medical societies.

No Total Registration of Doctors Now

Please reassure your membership that *not all M.D.'s up to age fifty-one are to be registered now;* they will register in groups according to priorities listed in Public Law 779, 81st Congress. The registration at this time is limited to those in the first

(Continued on Page 1256)

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No Total Registration of Doctors Now

(Continued from Page 1254)

priority, as listed above. Those in the first priority who do not volunteeer can expect to be draftcd in the very near future.

Medical Procurement Advisory Committee

The MSMS Council has appointed a Medical Procurement Advisory Committee, representative of all geographical areas of Michigan. This committee is available for advice in questions of procurement and may be reached by addressing the Chairman, c/o 2020 Olds Tower, Lansing 8, Michigan.

The Council recommends that evcry county medical society appoint a local Medical Procurement Advisory Committee from which the state Medical Procurement Advisory Committee may obtain information and advice when necessary. The MSMS Mcdical Procurement Advisory Committee recommends that the county committee be composed of its president, its secretary, and its immediate past president. Please certify the personnel of the county M.P.A. Committee to the MSMS Executive Office in Lansing as soon as possible.

You will be kept advised of developments and we sincerely trust that you transmit this and all future information without delay to your membership. This will eliminate much confusion and obviate a great deal of correspondence with Selective Service and with the military services (which are now swamped with thousands of tclegrams and letters of inquiry).

National Guard Medical Men to Receive Extra Pay

National Guard medical officers inducted into the Army of the U.S. will receive the $100 extra monthly pay under legislation approved by the President, Septcmber 21. The bonus payment is currently being made to Doctors volunteering for service in the Armed Forces.

Procurement and Assignment for Michigan

Grover C. Penberthy, M.D., Detroit, was appointed Chairman of Procurement and Assignment for Michigan by the MSMS Council at its September 22 meeting in Detroit.

H. H. Stryker, M.D., Kalamazoo, was chosen as First Vice Chairman and John R. Rodger, M.D., Bellaire, was selected as Second Vice Chairman of Procurement and Assignment for this State.

Brief of Doctor-Draft Law

Doctor-draft law recently enacted by Congress (Public Law No. 779) amends the Selective Service Act of 1948 and contains the following provisions:

1. *Authorizes the President to require special registration of and to make special induction calls for male physicians,* dentists, pharmacists, osteopaths, optometrists and veterinarians.
2. *Sets age limit for registration at 50;* provides none may be inducted after reaching his 51st birthday; specifies any inducted shall serve a maximum of 21 months . . . as medical officer if acceptable to military.
3. Provides for the following four priority groups of registrants, and that they shall be inducted, if necessary, in the following order:
   (a) Those deferred from military duty during World War II, including ASTP and V-12 doctors, to complete their professional training and who subsequently had less than 90 days active military duty or Public Health Service duty.
   (b) Those in the foregoing category who had more than 90 days but less than 21 months of active military or Public Health Service duty.
   (c) Others within the age limitation who did not have active military or Public Health Service duty subsequent to Sept. 16, 1940.
   (d) Those not in categories (a) and (b) who had some military or Public Health Service duty subsequent to September 16, 1940, under a procedure whereby those who served the least number of months would be called ahead of those who served a greater period of time.
4. Exempts from registration and induction physicians who are members of reserve components of the armed forces, as they are already subject to direct call from their component military service.
5. Endorses annual deferment from active duty of premedical, predental, preosteopathic and preveterinary students in numbers at least equal to the numbers of such students now in attendance.
6. Provides for deferment of covered registrants whose deferment is found to be equitable and in the national interest, taking into consideration length of previous service, extent of participation in the ASTP or V-12 programs, reasons of hardship or dependency, and the maintenance of the national health, safety, or interest.
7. Provides for $100 a month extra pay for physicians who volunteer for active service and for all reserve officers, regardless of whether they volunteer for or are ordered to active duty.
8. Authorizes the establishment of a National Advisory Committee to Selective Sèrvice to co-ordinate the work of local and state advisory Committees on the selection of needed medical personnel.

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CIVILIAN DEFENSE

To the Council of the
Michigan State Medical Society
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Gentlemen:

As your representative I attended the meeting of the Regional Council on National Emergency Medical Service held at the Sheraton Hotel in Chicago on September 10, 1950.

I enclose a list of those present from which you will note that our Society was poorly represented both in quantity and quality. Several delegations came complete with stenographer and took home complete transcripts of proceedings.

Reports from states as to present state of preparation for Civil Defense may be summarized as follows.

Ten states have no legislation or are operating under old laws. Indiana and Ohio have new legislation for Civil Defense.

In practically all states a Civil Defense Director has been appointed.

In about half the states the duties of Civil Defense and Procurement and Assignment are merged in some way in one committee. In the other half they are separate.

Apparently calls for reserve officers are being cleared by the Army with Procurement and Assignment boards throughout the Region. Neither the Air Force nor the Navy are making a practice of calling inactive reservists involuntarily.

The state of Tennessee has established three Mobile Radiologic centers for radiologic detection service in event of disaster.

In general, the state of preparation throughout the region parallels our own. Perhaps Indiana and Ohio are more advanced.

The Council stresses the mailing of their questionnaire to all physicians both from a Civil Defense standpoint and from a procurement standpoint. Since they are so insistent, I now recommend, that it be mailed to all physicians. I previously thought otherwise. I also recommend that the plan used in Iowa be duplicated. This plan marks the envelope "Military Information" and the questionnaire bears this notation: "If this questionnaire is not returned it will be assumed that the recipient will volunteer for military service." It is said that the return of questionnaires is reaching high percentages.

I enclose a release from the Department of Defense dated September 9, 1950, dealing with priorities in calling Dental and Medical Reservists. In this connection I asked the question of a representative of the Secretary of Defense as to the number of individuals with "exceptional qualifications" who would be called and got the impression that it would be relatively small but definitely tangible.

Doctor George M. Lyon spoke of organization of state and local units. He and all other speakers emphasized that this plan must be set up on a state or regional basis. Local organizations must be capable of local use but must also be mobile. This follows the previous conception on which all of our plans have been developed.

He strongly suggests doctors be indoctrinated in realistic organizational phases of this problem, teaching them what to expect in disaster. This follows previous recommendations made to you by your Emergency Medical Service Committee.

Doctor Lyon estimates casualties that will survive the first day of a bombing comparable to Hiroshima at 80,000. On this basis he represents blood requirements at 240,000 pints.

Some explanation was made of the proposed "dry run" to be held in Chicago and the similar exercises already held in Washington and Seattle.

Red Cross representative says his organization will aid in blood procurement, feeding and shelter, and in education of first aid personnel. The N.S.R.B. wants 20,000,000 people trained in first aid.

It is estimated by the Red Cross that twenty-five Auxiliary Nursing Personnel will be required for each nurse.

Major General Armstrong emphasized that the Air Force has called no reserves having supplied itself with enough volunteers. Brigadier General Schictenberg, of Office Secretary of Defense, emphasized that there would have to be reservists called to duty before draft of doctors, et cetera, becomes productive. How many depends on how many volunteers from A.S.T.P. and V-12 groups.

Rear Admiral Agnew of the Navy states they have called for most part only officers of organized reserve who have been drawing pay in their present peacetime assignments.

Colonel Simmons of Surgeon General's office of the Army stated they were short 750 medical officers before Korea. They have called in reserves and have at present about 150 applications from A.S.T.P. men. They feel the volunteer situation is brighter. No doctor can volunteer after he has been called by the draft board.

Colonel Eaves of Office of Selective Service reported that it would be about ninety days after draft of doctors is put into effect before the first would be in uniform.

All services emphasized that as of the present the only source of medical man power is the Reservist and the Volunteer.

General Armstrong strongly urged the P and A machinery be set in operation, because armed services have no way of knowing who is essential to the civilian community.

Respectfully submitted,

H. F. Becker, M.D.

GENERAL GEORGE C. MARSHALL, SECRETARY OF DEFENSE, ACTS

The Navy was ordered to assign V-12 reservists to active duty with Army.

The Army will release some of World War II reserves after three to four months.

Two developments have drastically changed the military medical situation. The net result is that far fewer World War II reserves than anticipated will be called to active duty in the next few months, and that many of

(Continued on Page 1260)

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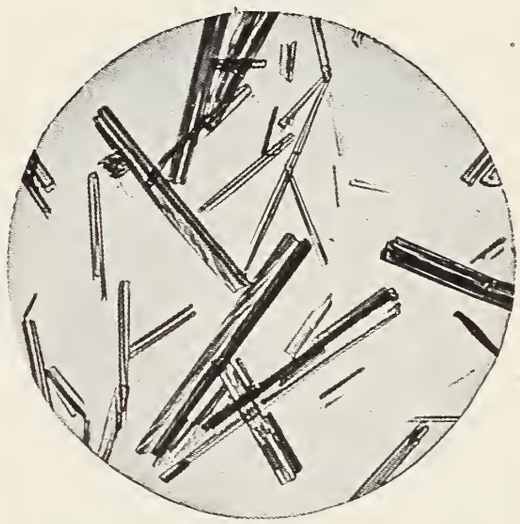
Efficacy: Produces, in microgram dosage, maximum hematologic and neurologic effects.

Tolerance: Extremely well tolerated; "no evidence of sensitivity" has been reported.

Toxicity Studies:

In recent pharmacologic investigations, extremely large doses of *crystalline* vitamin B_{12} (1,600 mg./Kg.) caused no toxic reactions in any of the animals treated. In contrast, 3 mg./Kg. of a "*concentrate*" caused fatal reactions in 100 per cent of the animals treated.

Merck—first to isolate and produce vitamin B_{12}—supplies Crystalline Vitamin B_{12} in saline solution under the trademark Cobione.* Your pharmacist stocks Cobione in 1 cc. ampuls containing 15 micrograms of crystalline vitamin B_{12}.



Crystalline Vitamin B_{12}

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GENERAL GEORGE C. MARSHALL, SECRETARY OF DEFENSE, ACTS

(Continued from Page 1258)

those currently on active duty or yet to be called on mandatory orders will be required to serve only three or four months, rather than twenty-one months.

The most important development came in a directive from the new Secretary of Defense, General George C. Marshall. He ordered the Navy to call up enough of its V-12 reserves to meet the immediate requirements of all three services, with the first 235 to be on duty with the Army by October 15.

Navy's total of 1,350 V-12 reservists who have not served on active duty should be ample to meet immediate demands. Most transferred V-12's will go to Army, which already has a call in for a total of 570. Air Force, with a growing medical reserve roll, probably will need few if any Navy men.

Even before Secretary Marshall announced his decision, Army had decided on an arrangement to cut down active duty terms of World War II reservists from twenty-one months to an average of three or four months. The plan calls for using veterans only until non-veteran replacements can be processed into uniform. Until Secretary Marshall's order, Army could plan on only two sources of non-veterans—volunteers and the doctor-draft. Now, with Navy told to supply the men, Army's plan can be implemented immediately.

From now on, the general policy will be to return veteran reservists to civilian life as fast as possible, with the hope that their active-duty tours will not exceed four months. This will apply specifically to men called without their consent, but volunteers with World War II service will also be given consideration.

Army will not be able to apply its new policy uniformly to all reserve officers. Some members from at least two groups will not benefit from the plan: (1) Certain senior officer specialists in various categories, whose professional skills make them difficult to replace. (2) Certain senior command and staff officers whose military background makes them difficult to replace.

Navy has not indicated whether it will attempt to follow the Army's policy of reducing the service of World War II medical veterans. It already has a number of these men on duty, called up on mandatory orders before it started using its V-12 reserves. However, Navy officials have been concerned with the problem and would like to find some way of replacing veterans with non-veterans.

This help from Navy won't meet all Army's requirements during the next two or three months. While waiting for the doctor-draft to produce medical officers, Army plans to call up a total of 500 reserves, mostly with World War II service. However, 350 of them can look forward to returning to their practice after three or four months, or as soon as the draft makes replacements available.

Of this new group to be called to active duty, 130 already have received orders. Another group of 220, members of organized military units, will be alerted when their units are called, but generally will be allowed to remain in civilian life until the units are ready to move. The remaining 150 are specialists and senior officers with command responsibilities. This group will not come under the new "four-month" policy, but will remain on duty as long as needed.

Army is understood to be ready with a request for about 900 physicians when the doctor-draft law goes into operation. All would be from the first priority—men who received all or part of their education either as ASTP's or V-12's and have not served on active duty. It will be these men, reporting for duty probably by the first of the year, who will make possible the release of World War II reservists.

ARMY TO REOPEN THREE GENERAL HOSPITALS

Representative Carl Vinson, chairman of the House Armed Services Committee, has announced that Army will reopen three general hospitals ordered closed last spring and enlarge the capacity of nine station hospitals. It was an Armed Services subcommittee, under chairmanship of Representative L. Mendel Rivers, which opposed the original closing orders, but was overruled by Defense Department. General hospitals affected are Valley Forge, Pa.; Murphy General, Waltham, Mass.; and Percy Jones General, Battle Creek, Mich. Bed capacity of the three will total almost 5,000. According to Mr. Vinson, action was taken in view of an increase in the rate of casualties to be flown back from Korea. To date slightly more than 3,000 have been returned; by December 1 it is estimated the total will reach about 11,500. Shortly after Mr. Vinson made the above announcement, Defense Department's Office of Medical Services (Dr. Meiling) issued a fact sheet, reviewing the military hospital situation from the start of the Korean war. It noted that between July 1 and October 1 operating capacity had been increased by 12,416 beds for a total of 49,408 (not including capacity of the hospitals to be reopened). According to the fact sheet, 20,908 operating beds were vacant at the time Mr. Vinson announced the hospital expansion program. Dr. Meiling's report also said that hospitals already activated could provide an additional 62,592 mobilization beds "as the need arises and personnel to staff them becomes available."

WHO IS IN THE RESERVES? SURGEONS GENERAL GIVE DEFINITIONS

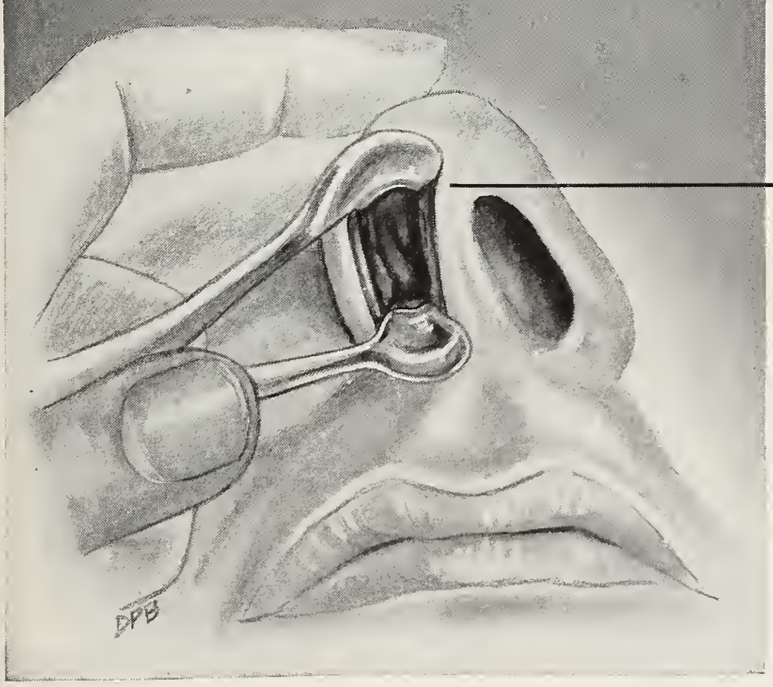
Inquiries to the Washington Office of AMA indicate uncertainty on the part of some physicians as to whether they actually are in the military reserves at this time, and therefore subject to call.

Because of the many laws, rules and regulations involved, only the proper military authorities can give a final answer in any particular case. The best advice this office can give is this: If the man served in the Army, and has (or thinks he might possibly have had) a reserve commission, he should contact the commander of the military district in which he resides for official determination of his status. If he served in the Navy, and is concerned about his status, he should contact the commandant of his Naval district.

At our request, the Army Surgeon General's Office

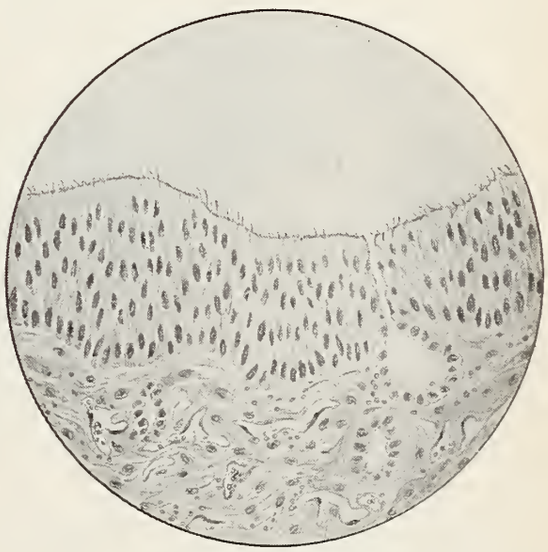
(Continued on Page 1350)

promotes
aeration . . . free drainage
in colds
. . . sinusitis



Nasal membrane showing increased leukocytes with denudation of cilia.

Normal appearing nasal epithelium.



Nasal engorgement and hypersecretion accompanying the common cold and sinusitis are quickly relieved by the vasoconstrictive action of

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Supplied in ¼% solution (plain and aromatic), 1 oz. bottles. Also 1% solution (when greater concentration is required), 1 oz. bottles, and ½% water soluble jelly, ⅝ oz. tubes.

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GOOD NEWS FROM OREGON

On September 28, 1950, Federal Judge Claude McColloch ruled that "Oregon's organized medicine" (Oregon State Medical Association and certain physicians) have not violated the Sherman anti-trust act in their prepaid medical service plan. The Government charged that the State Medical Society, a number of county societies and several physicians, sought to monopolize the field of prepaid medical care by refusing to deal with private agencies and by disciplining physicians who did deal with them.

Judge McColloch wrote:

"I hold that the Oregon Physicians Service is not a conspiracy but rather an entirely legal and legitimate effort by the profession to meet the demands of the times for broadened medical and hospital service, eliminating the evils of privately owned concerns as well as the element of private profit."

It is most interesting to note how minor was the newspaper coverage given this long awaited decision which strikes a decisive blow against the Administration's efforts to intimidate the medical profession. This lack of fanfare contrasts markedly with the trumpeting given the initial and unfounded accusations.

HIGHLIGHTS OF THE COUNCIL MEETING

September 17 and 22, 1950

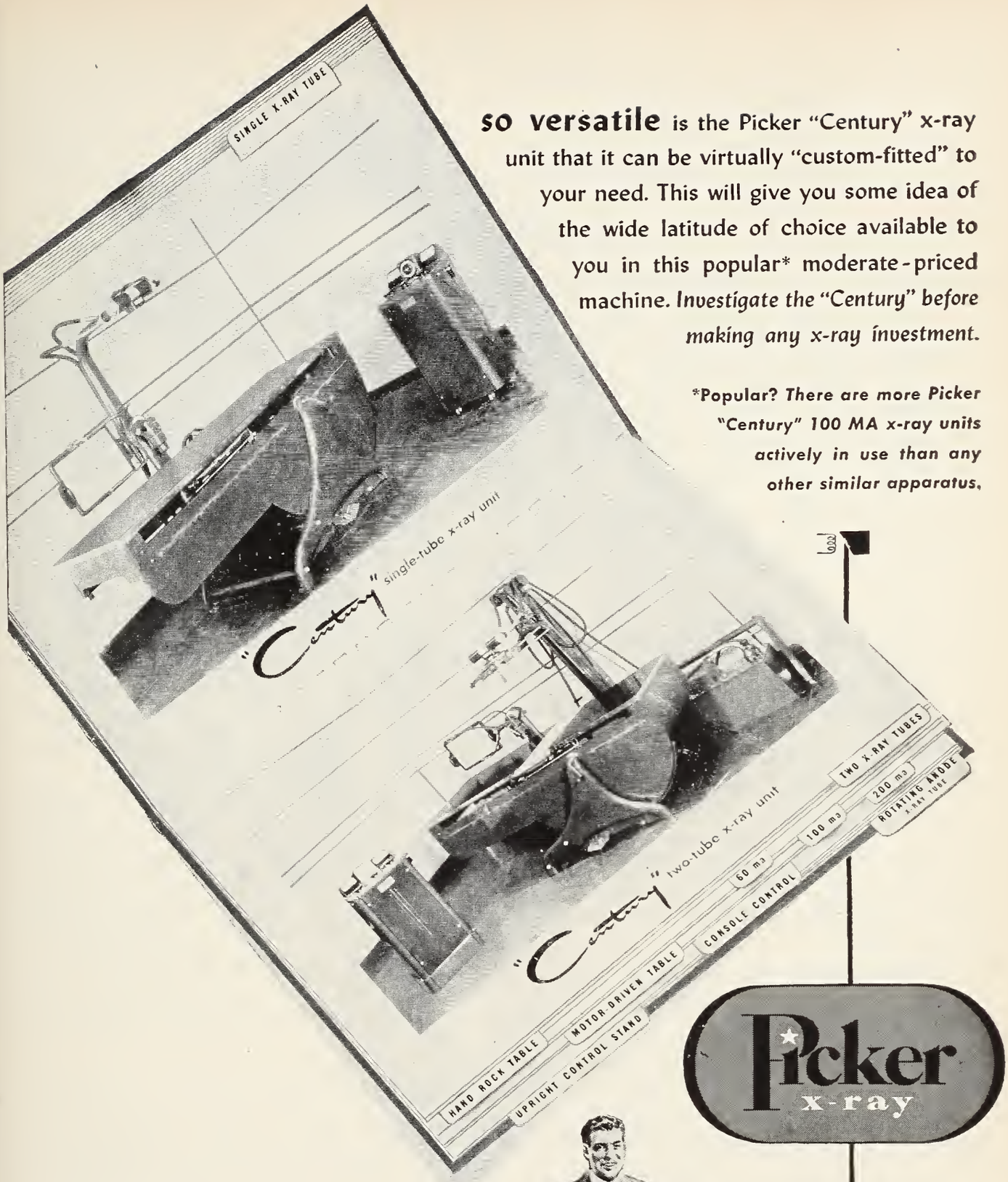
- Monthly financial reports were presented, studied, and approved by The Council.
- Report on bonds presented by Treasurer A. S. Brunk, M.D., also was approved.
- An 11-month financial report of the Cancer Control Committee was presented and approved.
- The monthly report of the MSMS Rheumatic Fever Control Co-ordinator (Lean DeVel, M.D.) was read and approved, including favorable action on recommendation for a scientific talk on rheumatic fever control, at one of the regular meetings of the Wayne County Medical Society.
- Procurement and Assignment for Michigan: The appointment of Grover C. Penberthy, M.D., Detroit, Chairman, H. H. Stryker, M.D., Kalamazoo, First Vice Chairman, and J. R. Rodger, M.D., Bellaire, Second Vice Chairman, was approved.

  A Medical Procurement Advisory Committee was authorized and The Council Chairman appointed the following personnel, approved by The Council: C. I. Owen, M.D., Detroit, Chairman, C. H. Frantz, M.D., Grand Rapids, W. H. Huron, M.D., Iron Mountain, E. C. Miller, M.D., Bay City, G. C. Penberthy, M.D., Detroit, J. R. Rodger, M.D., Bellaire, H. H. Stryker, M.D., Kalamazoo, M. J. Capron, M.D., Battle Creek. The Council decreed that all correspondence and all lists of reserve officers and draftees are to be referred to the Medical Procurement Advisory Committee for processing.

  A paragraph on the new doctor draft law was ordered inserted in the Supplemental Report of The Council.

  The Secretary was authorized to notify the Presidents, Secretaries and Editors of Michigan's county medical societies re (a) calling up reserve officers; and (b) draft registration; and (c) Medical Procurement Advisory Committee functions, in the Secretary's Letter.
- The Council endorsed the principle of legislation for the enrichment of flour, following precedent set by the American Medical Association.
- D. H. Kaump, M.D., Detroit, was recommended to the Governor as a member of the Technical Committee on Health and Medical Matters in Civilian Defense, as per the appointment of President-elect, C. E. Umphrey, M.D., Detroit.
- A resolution recommending an increase in the number of medical graduates from Michigan's two medical schools, for introduction into the 1950 MSMS House of Delegates, was approved by The Council.
- Meetings of MSMS Committees during MSMS Annual Sessions and during Michigan Postgraduate Clinical Institutes: The Council instructed that MSMS Committee Chairmen be requested to hold no meetings during the MSMS Annual Session and during the Michigan Postgraduate Clinical Institute except in cases of dire emergency, because of (a) lack of meeting rooms and (b) lack of secretarial coverage.
- National Emergency Medical Service Conference, Chicago, September 10—report of H. F. Becker, M.D., Battle Creek, Chairman of MSMS Emergency Medical Service Committee. This

(Continued on Page 1264)



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HIGHLIGHTS OF THE COUNCIL MEETING

(Continued from Page 1262)

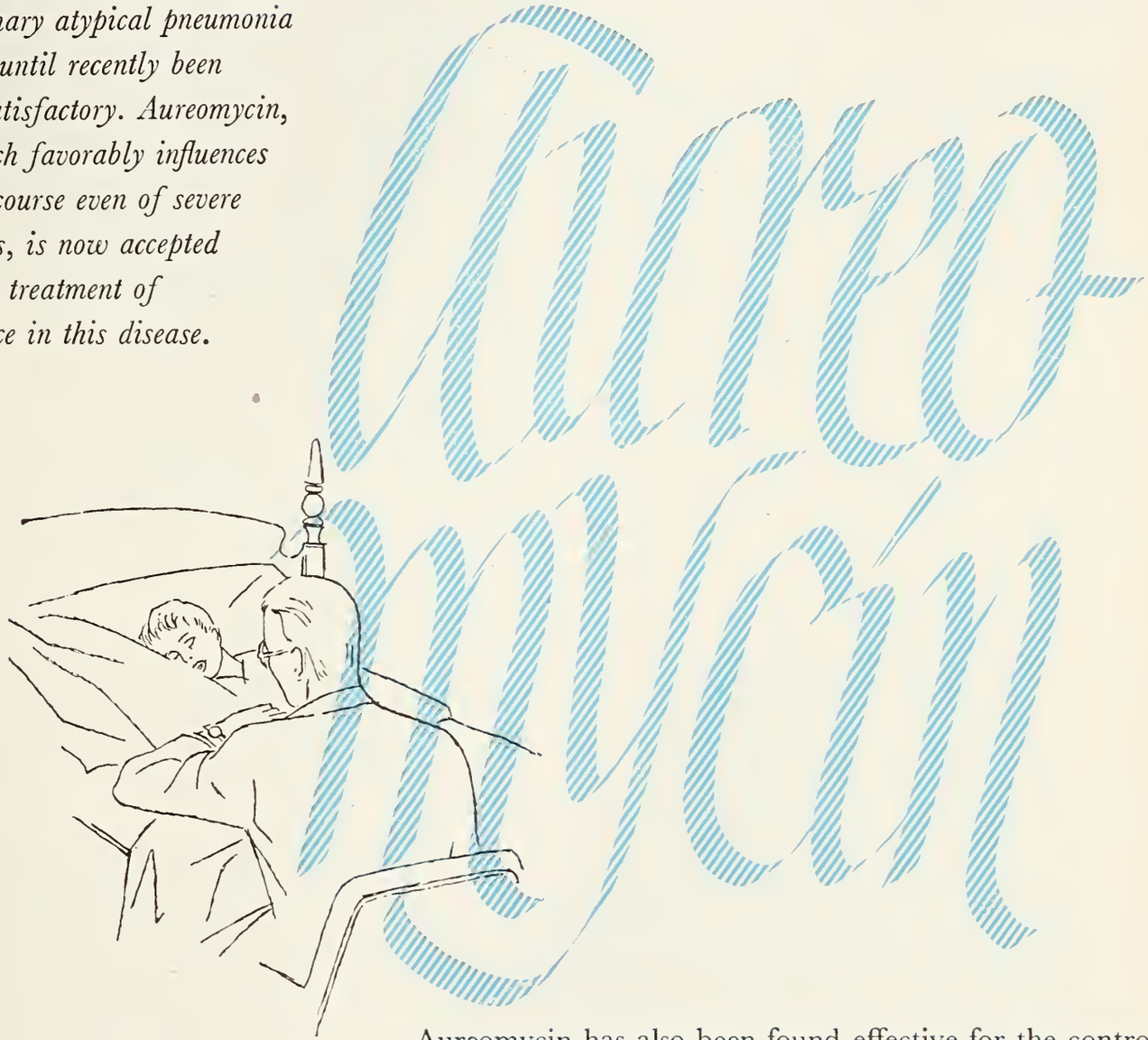
report was accepted and a letter of congratulations was ordered sent to Chairman Becker.

- Committees of Michigan Department of Public Instruction: (a) at the request of the Department, the Council added three additional physicians to the Advisory Committee on Technical Schools: M. S. Ballard, M.D., Grand Rapids, W. B. Harm, M.D., Detroit, and K. H. Johnson, M.D., Lansing. (The other doctors on this Committee are O. A. Brines, M.D., and R. H. Pino, M.D., of Detroit). (b) Advisory Committee on Practical Nurse Training Project is: K. L. Crawford, M.D., Kalamazoo, and A. Hazen Price, M.D., Detroit.
- Professor W. L. Mallmann of Michigan State College was appointed to the MSMS Committee on Atomic and Allied Procedures.
- Self-testing in diabetes was approved, as per the recommendation of the Chairman of the Subcommittee on Diabetes Control of the Geriatrics Committee, and following precedent set by the American Medical Association.
- Approval was given to the request of the Michigan Epileptic Clinic, Inc., which asked approval of the Clinic's plans to establish one permanent clinic in western Michigan and a number of traveling clinics for the purpose of diagnosis and consultation of convulsive disorders on a similar basis to the Michigan Crippled Children Commission clinics.
- The Editor's Report included allocation of special numbers and covers of JMSMS for the year 1951, which recommendations were approved.
- The Supplemental Report of The Council was presented, amended in several items, and approved for reference to the MSMS House of Delegates on September 18, 1950.
- The monthly progress reports of the Legal Counsel and of the Public Relations Counsel were presented and approved.
- Committee Reports. The following Committee reports were given consideration: (a) Committee on Atomic and Allied Procedures, meeting of September 13; (b) Committee on Study of Admission Policy at University of Michigan Hospital, meeting of August 17; (c) Public Relations Committee, meeting of August 20; (d) Emergency Medical Service, meeting of August 23; (e) Special Committee on Education, meeting of August 29; (f) meeting of Ubiquitous Hosts, September 6; (g) Committee to Study Veterans Facility at Grand Rapids, meeting of September 7; (h) Geriatrics Committee, meeting of September 7.
- Four new Councilors were introduced at the meeting of September 22: Second District, R. S. Breakey, M.D., Lansing; Third District, G. W. Slagle, M.D., Battle Creek; Fifteenth District, D. Bruce Wiley, M.D., Utica; Sixteenth District, W. D. Barrett, M.D., Detroit.
- Chairman O. O. Beck, Birmingham, was thanked for his extraordinary services to The Council and to the Michigan State Medical Society throughout the years and The Council expressed the hope that he would gain even more pleasure and satisfaction in his new work as President-elect and as President of the State Society.
- Letters of appreciation were authorized to be sent to retiring Councilors Wilfrid Haughey, M.D., Battle Creek, E. A. Osius, M.D., Detroit, and P. A. Riley, M.D., Jackson for their excellent services as Councilors and for their devotion of much time and effort on behalf of the Michigan State Medical Society.
- Reorganization of The Council. R. J. Hubbell, M.D., Kalamazoo, was chosen as Chairman; William Bromme, M.D., Detroit, was elected as Vice Chairman; W. S. Jones, M.D., Menominee, was elected Chairman of the Finance Committee; F. H. Drummond, M.D., Kawkawlin, was re-elected Chairman of the Publication Committee; and J. S. DeTar, M.D., Milan, was elected Chairman of the County Societies Committee.
- President C. E. Umphrey, M.D., announced, on September 22, the appointment of Chairmen and members of the 1950-51 MSMS Committees which were approved with authority being given to the President to add or delete, at his discretion.
- Report on Conference of Youth and Children in Michigan, by Frank Van Schoick, M.D., Jackson, and R. M. Kempton, M.D., Saginaw, was read and accepted, with thanks. Others present at this Lansing conference were: H. B. Zemmer, M.D., Lapeer; and Leon DeVel, M.D., Grand Rapids.
- Official thanks were placed on the minutes of The Council to all who helped make successful the 1950 MSMS Annual Session.

AUREOMYCIN
CRYSTALLINE

in Primary Atypical Pneumonia

The chemotherapy of primary atypical pneumonia has until recently been unsatisfactory. Aureomycin, which favorably influences the course even of severe cases, is now accepted as a treatment of choice in this disease.



Aureomycin has also been found effective for the control of the following infections: acute amebiasis, bacterial and virus-like infections of the eye, bacteroides septicemia, boutonneuse fever, acute brucellosis, common infections of the uterus and adnexa, resistant gonorrhea, Gram-positive infections (including those caused by streptococci, staphylococci, and pneumococci), Gram-negative infections (including those caused by the coli-aerogenes group), granuloma inguinale, *H. influenzae* infections, lymphogranuloma venereum, psittacosis (parrot fever), Q fever, rickettsialpox, Rocky Mountain spotted fever, subacute bacterial endocarditis resistant to penicillin, surgical infections, tick-bite fever (African), tularemia and typhus.

Capsules: Bottles of 25, 50 mg. each capsule. Bottles of 16, 250 mg. each capsule.

Ophthalmic: Vials of 25 mg. with dropper; solution prepared by adding 5 cc. of distilled water.

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MEDICAL MEETINGS AND CLINIC DAYS

A list of known medical meetings and clinic days, for the year 1951, sponsored by county medical societies and other physicians' groups in Michigan, follows:

January 31	Mt. Carmel Mercy Hospital Clinic Day	Detroit
February 8	Jackson County Medical Society's Clinic Day	Jackson
March 14-15-16	MICHIGAN POSTGRADUATE CLINICAL INSTITUTE	Detroit
March 17	SECOND ANNUAL MICHIGAN HEART DAY	Detroit
Spring	MSMS Postgraduate Extramural Courses	State-wide
April 3	Calhoun County Medical Society's Clinic Day	Battle Creek
April 4	SECOND MICHIGAN INDUSTRIAL HEALTH DAY	Detroit
April 18	Genesee County Medical Society's Cancer Day	Flint
April	Highland Park Physicians Club Clinic	Highland Park
May 3	Ingham County Medical Society's Clinic Day	Lansing
May	Bay County Medical Society Physical Medicine Conference	Bay City
Early June	Wayne University Alumni Annual Clinic	Detroit
June	St. Clair County Medical Society's Clinic Day	St. Clair
June	Upper Peninsula Medical Society Annual Meeting	
July 26-27	Annual Coller-Penberthy Medical-Surgical Conference (sponsored by Grand Traverse - Leelanau - Benzie County Medical Society)	Traverse City
Sept. 26-27-28	MICHIGAN STATE MEDICAL SOCIETY ANNUAL SESSION	Grand Rapids
October	Second Michigan Cancer Conference	
Autumn	MSMS Postgraduate Extramural Courses	State-wide
Oct. or Nov.	American Academy of General Practice of Wayne County	Detroit
November 7	Clara Elizabeth Fund Lectures (sponsored by Genesee County Medical Society and the Clara Elizabeth Fund for Maternal Health)	Flint

Additions to this list of meetings are invited by the Editor of JMSMS, in order to make this monthly announcement complete and accurate.

THE AMERICAN DERMATOLOGICAL ASSOCIATION, INC.

Prize Essay Contest

The American Dermatological Association is offering a prize of three hundred dollars for the best essay submitted of original work, not previously published relative to some fundamental aspect of dermatology or syphilology. The purpose of this contest is to stimulate younger investigators to original work in these fields.

Manuscripts typed in English with double spacing as for publication, together with illustrations, charts and tables, are to be submitted in triplicate not later than February 1, 1951, and should be sent to Dr. Louis A. Brunsting, Secretary, American Dermatological Association, 102-110 Second Avenue, Southwest, Rochester, Minnesota.

Competition in this prize contest is open to scientists generally; not necessarily physicians.

The award will be made by a committee of judges selected to pass on the essays by the Research Aid Committee of the American Dermatological Association and the decision of the judges shall be final. This contest is planned as an annual one, but if in any year, at the discretion of the Research Aid Committee and judges, no paper worthy of a prize is offered, the award may be omitted.

The prize-winning candidate may be invited to present his paper before the annual meeting of the American Dermatological Association with expenses paid in addition to the three hundred dollars prize. Further information regarding this essay contest may be obtained by writing to the secretary of the American Dermatological Association.

The next annual meeting of the American Dermatological Association will be the Diamond Jubilee Observance of its founding and will be held May 23-26, 1951, at the Homestead, Hot Springs, Virginia.

OFFICE SURGERY LIBERALIZATION

Michigan Medical Service has announced a new liberalization of office surgery, effective October 1, 1950. Previous liberalizations provided for payment of surgery done in offices if item was listed on fee schedule at $20.00 or more. *Under the new liberalization, which replaces all previous ones, specific procedures done in doctors' offices or in outpatient departments of accredited hospitals will be paid for according to the fee schedule.*

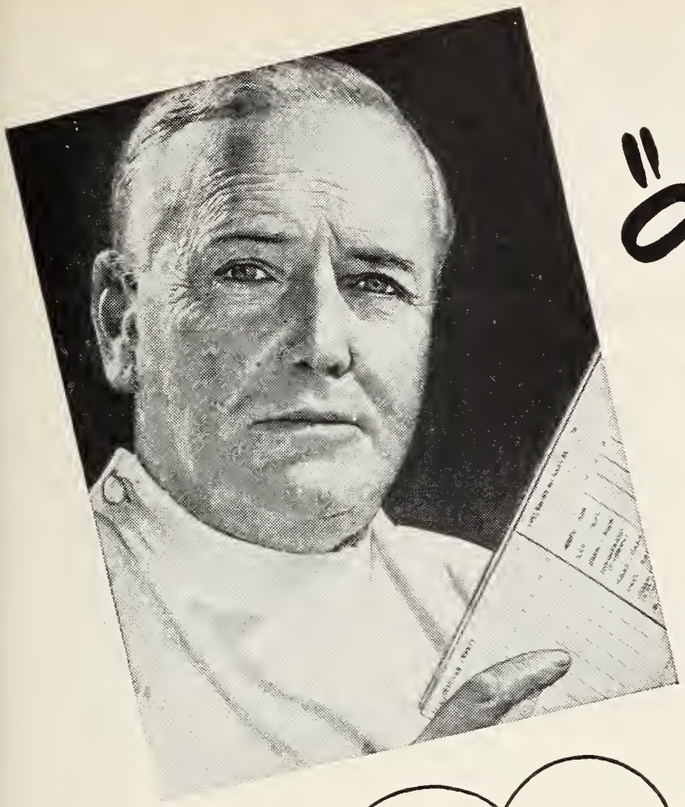
Under the new liberalization, Michigan Medical Service will pay for surgical anesthesia and diagnostic x-ray services, as defined in and to the extent provided for in the certificate, (if such x-ray and anesthesia services be rendered in connection with such surgical services but not otherwise) rendered to the subscriber in the office of a doctor of medicine or in the outpatient department of a regularly accredited hospital, for the following surgical services only: biopsy via scope; thermo cautery of cervix excision of cervical polyps; removal of nasal polyps; sub mucuous resection; tonsillectomy and adenoidectomy; abdominal parcentesis; circumcision; aural polyps; incision and drainage or excision of felon, carbuncle, pertonsilla

(Continued on Page 1268)

THROAT SPECIALISTS REPORT

ON 30-DAY TEST OF CAMEL SMOKERS...

"Not one single case of throat irritation due to smoking Camels!"



Yes, these were the findings of throat specialists after a total of 2,470 weekly examinations of the throats of hundreds of men and women who smoked Camels—and only Camels—for 30 consecutive days.

HARRY SOUTHWELL, lawyer, is one of hundreds, coast to coast, who made the 30-Day Test of Camel Mildness under the observation of throat specialists.

ACCORDING TO A NATIONWIDE SURVEY:

More Doctors smoke Camels

THAN ANY OTHER CIGARETTE

Yes, doctors smoke for pleasure, too! In a nationwide survey, three independent research organizations asked 113,597 doctors what cigarette they smoked. The brand named most was Camel.

R. J. Reynolds Tobacco Company, Winston-Salem, N. C.

OFFICE SURGERY LIBERALIZATION

(Continued from Page 1266)

or retropharyngeal abscess; deep abscesses in other areas in accordance with depth and size.

All other terms and limitations of the certificate remain in full force and effect.

AMA COMMITTEE REPORTS ON BRITISH HEALTH SERVICE

Conclusions of the five-man AMA Committee to Study Medical Care in England make it clear that the tremendously expensive experiment carried out under the National Health Act has degraded the practice of medicine and failed to improve the health of the British people.

The Board of Trustees last spring appointed five physicians qualified in internal medicine, surgery, pediatrics, general practice and industrial health to spend not less than six weeks in England, Wales and Scotland to inquire into the workings of the National Health Act and its probable future effect.

The report of the committee, composed of Doctors Walter B. Martin of Norfolk, Va., member of the Board of Trustees, Grover C. Penberthy of Detroit, Heyworth N. Sanford of Chicago, Ulrich R. Bryner of Salt Lake City, and Carl M. Peterson of Chicago, secretary of the Council on Industrial Health, was made to the House of Delegates in San Francisco and appears in the August 19 issue of *The Journal of the American Medical Association.*

In the course of the study, the committee members interviewed officers of the British Medical Association, Ministry of Health, and Fellowship for Freedom in Medicine; staff members of medical schools and hospitals, and a large number of general practitioners and others concerned with carrying out provisions of the service.

In summary, their fine report yields these conclusions:

1. The total cost of the service has far outstripped all estimates, and there is no evidence that the peak has been passed.

2. Despite the great amount expended for medical care in England, there is no present evidence that it has in any significant way improved the health of the people, or added to their happiness. All general hospitals have long waiting lists, in some categories as long as six months to two years. Out-patient departments are bulging. Offices of general practitioners in industrial areas are overcrowded and their facilities are grossly inadequate. Funds available for medical care have been dissipated on services that are not essential and essential services have suffered.

3. The tendency of the present system is to degrade the general practitioner to the level of a clerk or a guidepost to the specialist.

4. The service has produced a greater inequality of distribution of doctors, in proportion to population, and has diluted the quality of medicine.

5. It has added nothing to preventive medicine, but has disrupted public health work and produced serious problems in tuberculosis control and preventive dentistry.

6. It has created an almost complete autocratic control of medicine through concentration of financial power in the central government and the authority given the Minister of Health to govern by directions having the weight of law.

7. Abuses of the service are evident everywhere and must lead to more regulations, tighter enforcement, further limitations on freedom and further deterioration of the quality of medicine.

MEDICAL SCHOOL ENROLLMENT RECORDS

All records for enrollment in approved medical schools in the United States were broken in the past year.

This is brought out in the annual report of the American Medical Association's Council on Medical Education and Hospitals, published in the September 9 journal of the association.

The total enrollment in the seventy-two medical and seven basic science schools for the academic year 1949-1950 was 25,103. This represents an increase of 1,433 students, or 6 per cent, over the preceding year. The latest total is double the enrollment in 1910 (12,530), about 18 per cent higher than 10 years ago, and even larger than during the years of World War II, when extra classes were enrolled in all medical schools on an accelerated program.

From July 1, 1949, to June 30, 1950, 5,553 physicians were graduated from approved medical schools in the U. S., an increase of 459 over the preceding year. This is the largest number graduating from approved medical schools in the nation in one year except for the years 1946 and 1947, when several schools at the conclusion of their wartime program graduated more than one class during a twelve months' period.

On the basis of enrolments in the senior class for 1950-1951, the medical schools of the U. S. have estimated that they will have slightly more than 6,000 graduates during the coming year.

The freshman class for the first time exceeded 7,000 students during 1949-1950. The actual number, 7,042, represented an increase of 354, or 5.3 per cent, over the preceding year and an increase of 1,026, or 17 per cent, over the average size of the freshman class in the 10 years preceding World War II.

The freshman class that will enter medical school this fall will be even larger. On the basis of the record of the past year, the new schools that are being organized and the expansion of existing schools that is under way, it now seems likely that within the next few years the freshman class will number close to 7,500 students.

Women totaled 1,806, or 7.2 per cent, of the medical students in this country, compared to 2,109, or 8.9 per cent, in the preceding year. The percentage of veterans enrolled in the medical schools and schools of basic medical sciences in the U. S. during 1949-1950 was 65.9 per cent, which is almost identical with the figure 65.8 per cent for the preceding year.

The budgets of the medical schools and basic science schools for the 1950-1951 fiscal year total about $67,500,000, representing an increase of about 42 per cent in the last four years. It also said that figures of the cost of new construction, completed, started or authorized during the last year, were available for only one half of the projects reported and the total cost of these was more than $100,000,000.

"In general, symptomatic improvement [of menopausal symptoms] was striking within 7 to 14 days after treatment..." with "Premarin."

Gray, L.: J. Clin. Endocrinol. 3:92 (Feb.) 1943.

Many clinicians have found that "Premarin" therapy usually brings about prompt relief of distressing menopausal symptoms. Furthermore, symptomatic improvement is followed by a gratifying sense of well-being in a majority of cases. This is the "plus" in "Premarin" therapy which tends to quickly restore the patient's normal mental outlook.

Four potencies of "Premarin" permit flexibility of dosage: 2.5 mg., 1.25 mg., 0.625 mg., and 0.3 mg. tablets; also in liquid form, 0.625 mg. in each 4 cc. (1 teaspoonful).

While sodium estrone sulfate is the principal estrogen in "Premarin," other equine estrogens...estradiol, equilin, equilenin, hippulin...are probably also present in varying amounts as water-soluble conjugates.

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Cancer Comment

WHY CANCER PATIENTS DELAY SEEKING DIAGNOSIS AND TREATMENT

It has long been recognized that the great majority of cancer patients are incurable when first seen by a physician. Why do these conditions exist?

Many factors bear upon this problem. Different reasons apply to different patients. King and Leach (*Cancer,* July 1950) discuss this question in considerable detail and explain some but not all the reasons. Extent of the patient's knowledge of the nature of cancer, particularly the significance of early signs and symptoms is one major factor. The less informed delay the longest in the majority of cases.

Emotional attitudes toward the disease, fear of consequences of treatment, especially of early postoperative death, and an inability to face the knowledge of the presence of cancer, are all major factors in patient delay. Some would rather be spared the knowledge that they had cancer, even in early hopeful stages, than to know of its presence. They seem to be happier by assuming a detached attitude toward the problem, even in the absence of any religious beliefs they may have regarding disease in general.

Another group of cancer patients, composed of wives and mothers, often hesitate to seek medical help because of their home responsibilities and their fear of the neglect of their families in cases of prolonged disability or death.

Many patients hesitate to seek medical examination for seemingly slight and nondisabling symptoms, fearing the implied or expressed ridicule of the physician over such "trifling matters."

Age is also a factor; the older the patient when symptoms first appear the less likely is he to seek medical advice. Many such patients have had little contact with physicians throughout their lives and hesitate to consult them in their old age. They have developed a more or less fatalistic attitude toward their health problems.

Investigations have shown that because of frequent change in residence or other reason, a high percentage of cancer patients who delay in seeking medical advice do not have a family physician, hence are at a loss as to who should be consulted for their present condition.

One important fact that stands out in the discussion of the causes of delay in seeking medical help in cancer is that very few patients delay because of financial reasons. The statement is often made that many cancer patients cannot afford the necessary diagnosis and treatment because of the excessive costs involved. King and Leach found in their study referred to previously that "it appeared that delay in medical care was independent of income and all other economic factors, excluding hospitalization insurance." This confirms the findings in the Michigan Cancer Survey where but 2 per cent of the delay in 734 cases could be traced to financial reasons.

Another reason often assigned for delay is that of temporary subsidence of symptoms. As pain or other discomfort is the most common symptom compelling medical consultation, many patients refuse to seek medical advice in its absence.

The reasons for delay discussed above, and other reasons that apply to individuals, indicate the extreme importance of a widely expanded and intensified lay education program. Knowledge about cancer has far outrun its application to the saving of life. Too many potential cancer patients—which includes the entire population—have not had the knowledge of how to control cancer effectively impressed upon them. A recent national survey revealed that almost one-half of those questioned could not name one symptom of cancer, that one in seven still thinks cancer is contagious, that many still believe it is incurable and disgraceful.

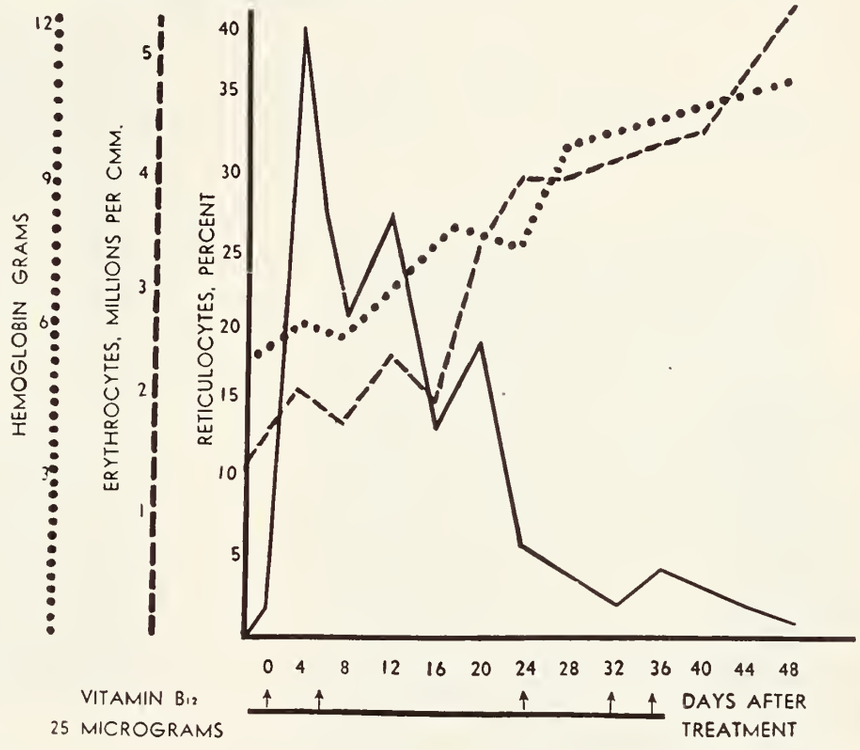
The most promising educational group today is in the high school and college ages. These young people rapidly approaching maturity can and should be taught the facts about cancer in their regular health studies. Experience has proved them capable of understanding and profiting from such instruction both in safeguarding their own health and that of their immediate families. Unlike their elders, their ideas about cancer have not yet become fixed in wrong channels. After forty-five—and even after twenty-five—education is not as effective as during the earlier years.

(Continued on Page 1315)

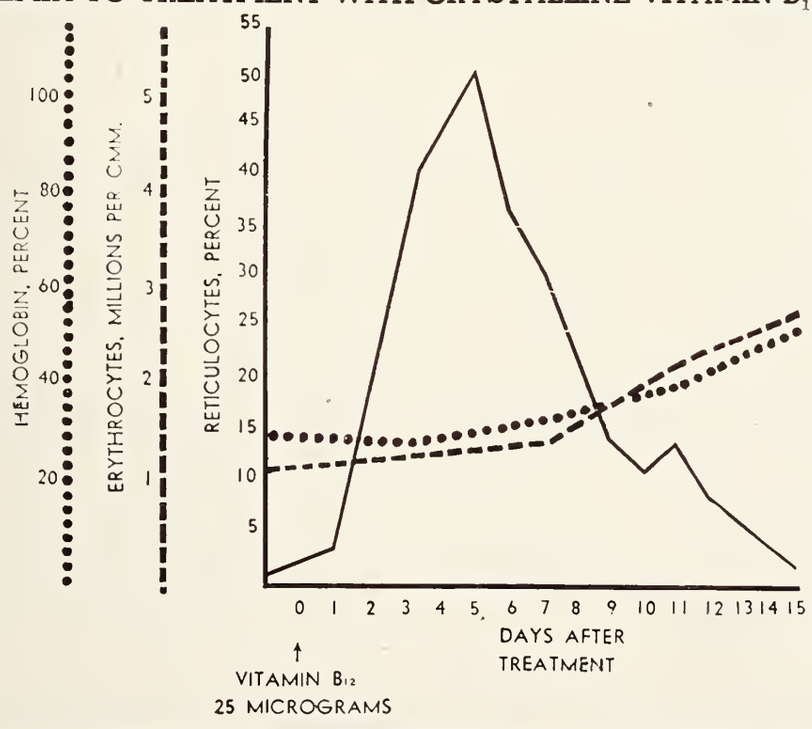
RESPONSE TO CRYSTALLINE VITAMIN B_{12} THERAPY

These charts are reprinted from the article "Crystalline Vitamin B_{12} in the Treatment of Megoblastic Anemias," by E. Schmatolla, M.D., A. Gibson, M.D., and J. M. Carlisle, M.D., which appeared in Postgraduate Medicine, Oct., 1949.

TYPICAL HEMATOLOGICAL RESPONSE OF PATIENT WITH PERNICIOUS ANEMIA IN RELAPSE TO TREATMENT WITH CRYSTALLINE VITAMIN B_{12}



TYPICAL HEMATOLOGICAL RESPONSE OF PATIENT WITH NUTRITIONAL MACROCYTIC ANEMIA TO TREATMENT WITH CRYSTALLINE VITAMIN B_{12}



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Annual Session Echoes

ATTENDANCE IN 1950

A total registration of 3,044 was marked up at the 85th Annual Session of the Michigan State Medical Society in Detroit, September 20-21-22, 1950. The breakdown of this high registration was as follows:

Doctors of Medicine	2,205
Residents, interns, guests	374
Exhibitors	465
Total attendance	3,044

TOP COVERAGE BY PRESS, RADIO AND TELEVISION

C. E. Umphrey, M.D., Detroit, *President*

One of the busiest places at the MSMS Annual Session was the Press Room. The enlightened co-operation of the ubiquitous hosts provided conferences between guest essayists and science writers which were productive of good publicity the like of which few medical meetings either obtain or merit. Thanks to the effort of Jack Pickering, *Detroit Times,* Robert Goldman, *Detroit Free Press* and Allen Shoenfield, *Detroit News,* the front pages of these three metropolitan dailies carried highly accurate accounts of the manuscripts and proceedings of the session.

O. O. Beck, M.D., Birmingham, *President-Elect*

The printed word was complemented by photographers' flash bulbs, television cameras and radio microphones which carried to the people the basic message that the doctors were alert to the problems of today's health and were doing something about them! Wire services were also generous in their time allocation to the material presented.

"Extra-conference" presentations were made as follows:

Service Club Talks

Place—Station	*Program—Arrangements*	*Date-Time*
Grosse Pointe Rotary	L. Fernald Foster, M.D. War Memorial 32 Lake Shore Drive	Sept. 18 Monday— noon
Main Line Lions	J. S. DeTar, M.D. Statler Hotel	Sept. 19 Tuesday— noon
Public Health Nurses of Wayne County	Hugh W. Brenneman St. Paul Evangelical Church	Sept. 19 Tuesday— noon
Main Line Kiwanis	L. Fernald Foster, M.D. Statler Hotel	Sept. 19 Tuesday— 12:15 p.m.
Medical Assistants Meeting	Hugh W. Brenneman Detroit-Leland Hotel	Sept. 20 Wednesday —11:00 a.m.
East Side Lions	W. B. Cooksey, M.D. Whittier Hotel	Sept. 20 Wednesday —12:15 p.m.
Woman's Auxiliary	Russell F. Staudacher Statler Hotel	Sept. 21 Thursday— noon
Medical Assistants Meeting	L. Fernald Foster, M.D. E. A. Osius, M.D. Detroit-Leland Hotel	Sept. 21 Thursday —noon

TV Show

Bob Murphys' Matinee	C. E. Umphrey, M.D. H. F. Becker, M.D. **(Live)**	Sept. 18 Monday

Radio Programs

WJBK-TV	A. A. Humphrey, M.D.	4:30 p.m.
Radio Station WJR	E. L. Henderson, M.D. House of Delegates (transcribed)	Sept. 19 Tuesday— 10:45 p.m.
Radio Station WXYZ	H. F. Becker, M.D. A. A. Humphrey, M.D. L. Fernald Foster, M.D. (transcribed)	Sept. 21 Thursday— 1:15 p.m.
Radio Station WWJ	A. H. Whittaker, M.D. Kenneth Johnson, M.D. Ray Waggoner, M.D. (Live)	Sept. 21 Thursday— 7:30 p.m.
Radio Station CKLW	James Fyvie, M.D. E. F. Sladek, M.D. L. Fernald Foster, M.D. Hugh W. Brenneman (moderator) (transcribed)	Sept. 22 Friday— 11:00 p.m.

(Continued on Page 1274)

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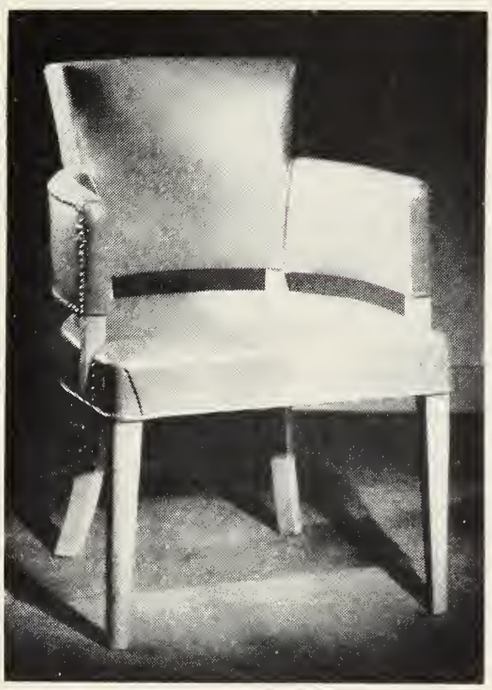

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TOP COVERAGE

(Continued from Page 1272)

Radio Programs

Radio Station WJR	L. Fernald Foster, M.D. C. E. Umphrey, M.D. J. S. DeTar, M.D. "In Our Opinion" Cushing (transcribed)	Sept. 24 Sunday— 12:30 p.m.

FIFTY-YEAR CLUB TOTALS 137

Although only four years old, the "Fifty-Year Club" gained seven members to swell its total enrollment to 137. Founded for the purpose of paying tribute to those physicians who have practiced medicine for a half century or longer, the induction into office has become a standard feature of the Officers' Night ceremonies at the MSMS Annual Session.

Inducted this year were: George R. Pray, M.D., Jackson; Edward O. Sage, M.D., Detroit; Edward B. Ramsey, M.D., Detroit; Lewis L. Stewart, M.D., Jackson; H. H. Learmont, M.D., Croswell; Wm. J. Stapleton, Jr., M.D., Detroit; and Charles Norton, M.D., Detroit.

DR. DeTAR HONORED

J. S. DeTar, M.D.

Additional honors came to J. S. DeTar, M.D., Milan, Councilor of the Fourteenth District, when he was presented with a Past Speaker's Key emblematic of his three terms as Speaker of the House of Delegates of the Michigan State Medical Society. The award was made during the Officers Night ceremonies at the 85th MSMS annual session, on Wednesday, September 20, 1950, and was presented by President W. E. Barstow, M.D., St. Louis, Michigan.

WHAT THEY THOUGHT OF THE 1950 MSMS ANNUAL SESSION

E. L. Henderson, M.D., Louisville, Kentucky, (President, American Medical Association): "I have just returned to the office from my trip to Detroit and Omaha and I want to take this opportunity to thank you for the many courtesies which I received while in Michigan. I have never been more royally entertained and taken care of better than during my stay there and I cannot tell you how much I appreciate it.

"I also wish to thank you and the Michigan State Medical Society for the wonderful scroll which was presented me. I appreciate it very much indeed and it shall occupy a prominent place in my office.

"Again thanking you for your many courtesies and with regards and good wishes."

* * *

W. A. Altemeier, M.D., Cincinnati, Ohio, (Guest Essayist): "I wish to express my sincere appreciation for the kindness and hospitality shown me by my host, Doctor George Moriarty, and by the Michigan State Medical Society during my recent trip to Detroit."

* * *

Edward I. Bortz, M.D., Philadelphia, Pa., (Guest Essayist): "My sincere thanks to you. I have never been more graciously entertained in my life. The few hours I spent in Detroit were thoroughly enjoyable. It pleased me to note the cordial and interesting reception to my remarks. I was also gratified by the unusual interest of the audience during the question and answer period."

* * *

H. W. Brown, M.D., New York City, N. Y., (Guest Essayist): "I want to congratulate the Michigan State Medical Society and especially you, for the efficient way in which the convention was handled. Every need and desire seemed to be anticipated and arranged for in advance. Mrs. Brown and I had a most delightful time during our stay, all made possible by the kind efforts of Dr. Gemeroy.

"Thanking you for the invitation to take part on such an outstanding scientific program."

* * *

J. O. Christianson, St. Paul, Minn., (Biddle Orator): "Thanks again for your many courtesies and the beautiful scroll."

* * *

S. A. Cosgrove, M.D., Jersey City, N. J., (Guest Essayist): "Please accept the deepest appreciation of Mrs. Cosgrove and myself for the great courtesy shown us during the recent State Society meeting by everyone of your members and especially by Doctor Darling of Detroit."

* * *

Charles A. Doan, M.D., Columbus, Ohio, (Guest Essayist): "Just a further written expression of my personal statement to you while in Detroit last week, in genuine appreciation of the fine courtesies extended by the Michigan State Medical Society to its guest speakers. I have never attended any meeting where the arrangements had been so perfectly anticipated in detail. Doctor McBroom and Doctor Pollard were delightful and efficient social and seminar hosts, respectively, and I want to tell you, officially, how completely this discharge of their respective duties was handled.

"I particularly was impressed with the individualization of your planning in so large a scientific program, reflected in the change which you so promptly and graciously made in altering the hour of my seminar discussion from 5:00 p.m. to 4:00 p.m. because of my Washington, D.C., commitments the following day. I only hope that I may have been able to bring to the membership the information and enthusiasm which they deserve.

"Once again, congratulations on an unusually complete and effective organization without the loss of the personal touch all along the line."

* * *

Frederic A. Gibbs, M.D., Chicago, Illinois, (Guest Essayist): "I greatly enjoyed the opportunity to attend the meeting of the Michigan State Medical Society as a guest speaker, and was delighted with all the arrangements which were made in my behalf. It was a pleasure to meet so many old friends and to make new acquaintances among those who are particularly interested in epilepsy."

* * *

L. F. Hill, M.D., Des Moines, Iowa, (Guest Essayist): "My participation in your 85th Session was a pleasant experience indeed, and Dr. Ed. Martmer, my host, took excellent care of me."

(Continued on Page 1276)

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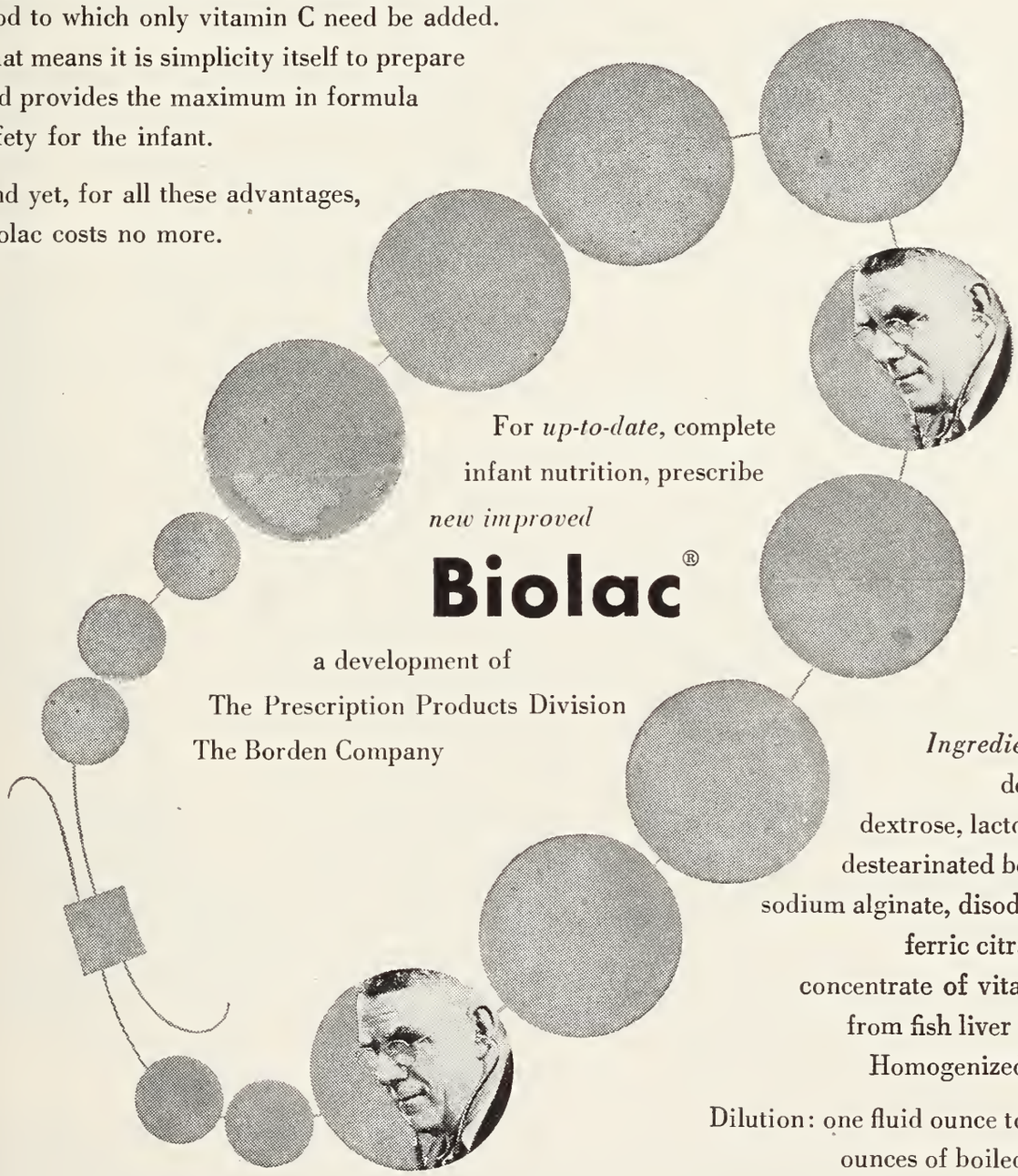

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WHAT THEY THOUGHT OF THE 1950 MSMS ANNUAL SESSION

(Continued from Page 1274)

John R. McDonald, M.D., Rochester, Minn., (Guest Essayist): "I wish to thank you for the invitation to talk as well as the wonderful hospitality which was extended to me during my stay in Detroit. I am writing Dr. Kaump to thank him for the time he spent with me in making my stay so enjoyable."

* * *

W. F. Mengert, M.D., Dallas, Texas, (Guest Essayist): "May I thank the Michigan State Medical Society through you for their courtesy in looking after me in Detroit. I greatly appreciated coming to the meeting and am only sorry that my stay of necessity was so brief."

* * *

G. C. Prather, M.D., Brookline, Massachusetts, (Guest Essayist): "I must repeat that I believe you have the annual meeting beautifully organized, so that certainly as far as your guest speakers are concerned there could be no improvement in the management thereof."

* * *

J. T. Priestley, M.D., Rochester, Minn., (Guest Essayist): "I would like to thank you for the opportunity of attending the meeting of the Michigan State Medical Society and for the unexcelled hospitality which you extended to me at that time. You and your associates certainly are past masters at putting on a medical meeting of quality, and you treated your guests in a manner which makes them wish to return soon."

* * *

Anthony Rottino, M.D., New York, New York, (Guest Essayist): "I wish to thank the Michigan State Medical Society for your invitation to me for the fine courtesy shown to me by members of the Society. I enjoyed talking to the quiz group which was quite stimulating. I was delighted with my ubiquitous host, Doctor Kasper."

* * *

Fredrick F. Yonkman, M.D., Summit, New Jersey, (Guest Essayist): "We appreciated the kind letter from President Barstow and Secretary Foster which we received upon arriving at the Book-Cadillac, Thursday night. We very much regret that we could not attend all of the festivities as of Wednesday morning on, but our schedule did not permit our taking advantage of the opportunity. Our stay in Detroit was most enjoyable and I assure you it was a pleasure, as well as a privilege, to be able to contribute to your program."

* * *

Ira G. Downer, M.D., Detroit, (Ubiquitous Host): "Guest Essayist, Raymond W. McNealy, M.D., just called me long distance to tell me again what a nice time he had at the MSMS Annual Session. All in all, it was mutually a very pleasant experience for all of us."

* * *

A. M. Campbell, M.D., Grand Rapids, (MSMS Member): "Again I am happy to have lived another year and to congratulate you on the splendid meeting of the Michigan State Medical Society. I think it was one of the best programs that you folks have ever put on. In fact I think it is the equal of any national program."

* * *

W. S. Nolting, M.D., Detroit, (MSMS Member): "A word of congratulation on the efficient way the meeting went along. The essayists certainly felt that the officers in charge did a splendid job arranging so many details.

"Again, my compliments for a good meeting well done."

* * *

Mac F. Cahal, Kansas City, Mo., (Executive Secretary, American Academy of General Practice): "What a remarkable meeting you had! After being there and experiencing the enthusiasm, one does not wonder that you enjoy such an outstanding reputation with the technical exhibitors."

L. H. Ashe, (E. R. Squibb & Sons, New York City), President, Medical Exhibitors Association: "On behalf of the Medical Exhibitors Association and all of its members, and, more particularly, myself and wife and those past and present officers who were privileged to attend the Exhibitors Gridiron dinner, I want to thank the Michigan State Medical Society most cordially for their initiative in extending this tribute to us, and for the many courtesies which were shown us during our visit in Detroit."

* * *

Frank M. Rhatigan, (Davis & Geck, Inc., Brooklyn, N. Y.), Past President MEA: "I am very happy that the MSMS Annual Session and especially the Gridiron Dinner turned out to be such a success. So far as the MEA is concerned, I am quite sure they will go on record with some form of recognition to the Michigan State Medical Society for the honor that was paid to us on September 21, 1950."

* * *

H. J. Cowell, (Lea & Febiger, Philadelphia, Pa.), Past President of MEA: "I would not have missed your 20th anniversary celebration of the founding of the Medical Exhibitors Association for anything. You, your staff and the Michigan State Medical Society, are due for congratulations all the way around."

* * *

S. A. Montgomery, (Gerber Products Company, Fremont, Michigan): "The Michigan State Medical Association always arranges exhibits efficiently. Intermissions between sessions are arranged during the mornings and afternoons. This encourages physicians to visit exhibitors. Michigan State Medical Society always produces a good show both from the physicians' and the exhibitors' viewpoint."

* * *

James T. Beers, (Coca-Cola Company, Atlanta, Georgia): "I can't begin to tell you what a pleasure it was for me to have visited at the Michigan State Medical Convention. We always look forward to our participation at this show as we consider it tops. I appreciate your hospitality more than I can say."

* * *

George A. Triplett, Detroit, (Medical Protective Company, Fort Wayne, Indiana): "Just a note to congratulate you on your usual superb job of running a medical meeting and to thank you. It was most delightful and I appreciated being included."

* * *

Wm. F. Funkhouser, (C. B. Kendall Company, Indianapolis, Indiana): "We wish to thank the many old and new physician friends who registered at our Exhibit Booth during the 1950 Convention. Because of your kindness and the capable direction, we consider the Michigan State Medical Convention tops on our budget list for convention exhibits."

* * *

G. Theodore Fredstrom, (Wm. S. Merrell Company, Cincinnati, Ohio): "We wish to say it was a pleasure to attend your meeting this year, and look forward to receiving the prospectus for your 1951 assembly."

CORRECTION

ACTH and Colchicine in the Clinical Treatment of Acute Gouty Arthritis (Wolfson et al: J.M.S.M.S., 49: 1058, September, 1950):

The dosage should be as follows: .00065 gm. of colchicine (1/100 gr.) is given four times daily, and reduced to .00065 gm. three times daily if not well tolerated. Further reduction is to .00065 gm. twice daily.

The article contains a second error. In Figure 1, the lower righthand subdivision should show 44 per cent of previously untreated patients as responding to 50 mg. or less of ACTH, rather than 54 per cent as indicated in the published figure.

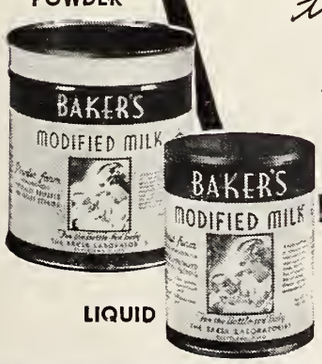
A Doctor WHO RAISED HER OWN BABY ON BAKER'S SAYS...

As one who is supposed to know something about infant feeding formulas, and who has actually experienced making them, I have some special comments. With Baker's my baby has had almost no bowel trouble. I find it convenient to keep boiled water and then quickly mix fresh Baker's Milk formula as I need it, so that I never use formula which has been standing around for 24 hours or more. A more complicated formula has to be made at an opportune time and then put away for use. I prefer fresh formula — Baker's Formula.

My baby, Martha, has turned out to be a delightful child and healthier than most. Many new mothers, and fathers too, have asked how I fed her — so I advise Baker's.

Name on request.

POWDER



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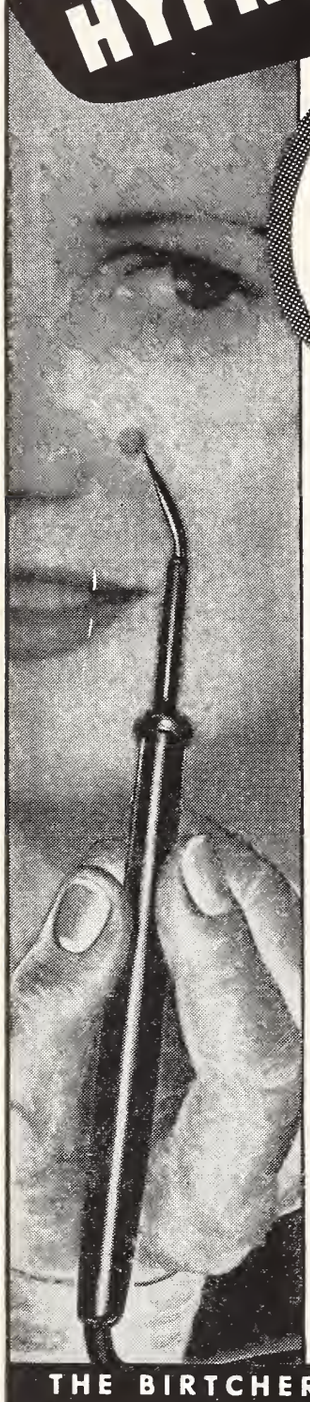

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MICHIGAN LAWYERS OPPOSED TO SOCIALISM

Michigan's legal profession through its state organization, the State Bar of Michigan, has again reaffirmed its opposition to any form of socialized medicine. The action of the lawyers was taken Thursday, September 28, when the group passed a strongly worded resolution at its 1950 Annual meeting in Grand Rapids.

The resolution which puts the State Bar among the strongest supporters of the free enterprise system was introduced in the State Bar by LeMoyne Snyder, M.D., East Lansing, prominent attorney and member of the Michigan State Medical Society.

The complete text of the Resolution follows:

"WHEREAS, such legislation as S. 1679 will to all intent and purposes centrally control and socialize medicine and politically control medical practices, and constitutes a direct attack on the rights and liberties of the citizens of this country; and

"WHEREAS, Compulsory Health Insurance wherever tried has caused a decline in national health and a deterioration of medical standards and facilities; and

"WHEREAS, Socialized medicine such as proposed by Senate Bill 1679 has never proven to be of advantage either to the patient, the medical profession or the community in which it is adopted; and

"WHEREAS, whenever the Government has assumed control of medical services, the result has been tremendous multiplication of costs over original estimates, extreme tax burdens and National deficits, and gradual extension of socialization into other activities of National life; and,

"WHEREAS, the American Bar Association in 1944, disapproved S. 1161 and reiterated its opposition to socialized medicine in 1949 by opposing S. 1679; now, therefore be it

"RESOLVED, that the State Bar of Michigan does hereby go on record as opposing S. 1679, and similar legislation, which will subject the practice of medicine to federal control and regulation beyond that presently imposed under the American system of free enterprise; and be it further

"RESOLVED, that a copy of this resolution be forwarded to each Senator and Representative from the State of Michigan, and that said Senators and Representatives be and are hereby respectfully requested to use every effort at their command to prevent the enactment of such legislation."

A competitive examination for appointment of Medical Officers in the Regular Corps of the United States Public Health Service will be held on February 12, 13, and 14, 1951. Examinations will be held at a number of points throughout the United States, located as centrally as possible in relation to the homes of candidates. Applications must be received no later than January 15, 1951.

The JOURNAL
of the Michigan State Medical Society
Issued Monthly Under the Direction of the Council
VOLUME 49 NOVEMBER, 1950 NUMBER 11

American Medicine Looks Ahead

By Elmer L. Henderson, M.D.
President, American Medical Association

I APPRECIATE this opportunity to speak here in Michigan, for no state in the Union provides a better example of the vitality and the benefits of the American way of life.

Your great automobile industry, as just one case in point, typifies the growth and initiative of all American industry, the rising standards of American living, and the constant improvement in relations between American labor and management.

Likewise, Michigan's physicians, dentists and nurses, fine hospitals and medical schools, and state public health program exemplify the high standards and modern methods which have made the United States the healthiest major nation in the world.

And the Michigan State Medical Society, in particular, represents the progressive thinking and positive action which constitute the *true* policy of the entire American medical profession—a policy sincerely devoted to the maintenance of high standards, the protection of the public health, and the provision of adequate medical care for all the people.

I emphasize the word *true* because our policies and motives have been so crudely and maliciously distorted by the advocates of socialized medicine in America. One of the favorite distortions, for instance, is the charge that the medical profession is a so-called "close corporation," which "is trying to hold down the number of new doctors." This is utterly false—and the refutation of the charge lies no farther away than the facts of the matter right here in Michigan.

In 1948 the House of Delegates of the Michigan State Medical Society passed a resolution urging an *increase* in the number of graduates from the medical schools in this state. The state medical society followed up this action by asking the Michigan Legislature to grant money for additional medical school facilities at both the University of Michigan and Wayne University.

Since then, as a result of further efforts in which Michigan doctors played a major role, the state legislature has authorized the construction of a medical center building at the University of Michigan Medical School, and the development of plans for a Medical Science Building at Wayne University College of Medicine.

The Michigan State Medical Society was the prime mover in the three Michigan Rural Health Conferences called in 1947, 48 and 49. Those conferences emphasized ways and means of increasing facilities for the training of doctors, establishing more facilities for the practice of medicine in rural areas, and setting up a loan fund for medical students who will agree to practice in rural areas.

The Michigan State Medical Society has given financial support to the Michigan Health Council from the time of its formation. The Society has worked actively with the Council to help achieve one of its major objectives—widespread public support for increased medical education facilities. Here in Detroit, on October 1, the Michigan State Medical Society and the American Medical Association's Council on Medical Service will be joint sponsors of a National Conference on "M.D. Participation in Health Councils."

The Michigan State Medical Society has urged continuation of the present policy on admissions to medical schools—a policy based solely on merit and aptitude, regardless of race, creed or ancestry—in

Delivered before the House of Delegates of the Michigan State Medical Society, September 19, 1950, Detroit, Michigan.

order to obtain the best qualified and maximum number of doctors.

Finally, at this convention this week, the Michigan State Medical Society will be discussing new plans for an increased effort on behalf of Michigan's two Grade A medical schools—plans calling for additional funds from the state legislature and the public-spirited citizens of Michigan, so that both facilities and faculties will be adequate to meet the present and future need for doctors.

Those are the facts in Michigan. And the facts in Michigan are typical of actions and programs throughout the nation. State and county medical societies in all parts of the country—in co-operation with public and private agencies and the general public—are working actively to increase the funds available for medical education . . . to provide more scholarships and loans for medical students . . . to place doctors in communities which need them . . . to set up clinics or other medical facilities where they are needed . . . to guarantee adequate medical care to everyone, regardless of ability to pay, and regardless of the time of night or day . . . to aid the rapid growth and improvement of all sound voluntary health insurance plans . . . and to give the public more and better information on problems of health and medical care.

These and similar programs have more than just the approval of the American Medical Association. They represent the national policy of the medical profession, and the American Medical Association has been urging the full development of such progress in every state, county and locality.

This is the *voluntary* way, the *American* way, the *successful* way to solve our problems—medical or otherwise. This is the way which has made our nation great and strong.

American medicine is determined to preserve that way of life. We firmly believe that national compulsory health insurance—which would place both patients and doctors under centralized, federal control—is a definite threat to the American way of life. For the experience of other nations demonstrates that the socialization of medicine would be only a first step toward the ultimate regimentation of all American life.

Now, at this critical point in American history, the medical profession faces a task that will require double effort, double vigilance and double victory.

Our first responsibility, as doctors, is to serve the health and medical needs of all Americans—in civilian life or in the armed forces, on the home front or on the battle front—wherever and however we are most capable of serving. It goes without saying that we medical men never will allow events of the past to interfere with patriotic duties of the present.

Our second responsibility, as citizens in the arena of public affairs, is to dispel completely any notion that our crusade against socialized medicine is merely a temporary outburst—in the nature of an epidemic or a flash flood. In this phase of our double task we must maintain and strengthen our professional unity—we must continue our direct, successful contact with the American people—we must be alert to the maneuvers and machinations of the home front socializers—and, above all, we must not be decoyed out of our position on the basic issue of freedom for medicine, and freedom for all America. Quite to the contrary, we must make that position strong and crystal clear.

For now—with our own nation once again emerging as the chief defender of freedom, in a world of tension and danger—medicine's cause has greater validity and greater significance than ever before. If Americans are to work and fight in the name of freedom elsewhere in the world, logic demands that we preserve freedom in our own country. If there is to be practical meaning and moral purpose in the sacrifices of our fighting men abroad, then it becomes a national duty to guard basic American principles here at home. Any other course would be a tragic betrayal of both men *and* principles.

Fortunately, at this time of emergency, the American people are rallying to that point of view. As patriots, they naturally accept the necessity for temporary controls, limitations and directives during a period of national crisis. But they also recognize that a threat to basic American freedom already existed in this country, prior to the present war emergency. As a result, there has been an ever-increasing sense of vigilance—a growing awareness of danger.

We can be proud of the fact that medicine's national education campaign has played a major role in alerting the American people to the internal threat. In that campaign, since January, 1949, the nation's doctors have gone directly to the American public with the facts about compulsory health insurance—how it would affect the quality of medical care, the national health, the taxpayer's

pocketbook and, ultimately, the foundational structure of all American life. At the same time the campaign has stressed the positive story of American medical progress, the growth of voluntary health insurance, and the over-all vitality of a national philosophy based on individual initiative and freedom of action.

As a result of that effort—carried out openly in the area of public opinion—more than 10,000 national, state and local organizations, with many millions of members, have taken positive action against compulsory health insurance, or any other form of socialized medicine. Moreover, they have recognized that socialized medicine would be only the precedent—the first step—the infiltration maneuver—leading to the eventual death of the free enterprise system.

Medicine's campaign, winning a massive cross-section of public support, has spearheaded and stimulated an ever-broadening opposition to all forms of state Socialism in America. It has given courage and inspiration to thousands of individuals, organizations and groups who also like the American way of doing things. It has helped to rekindle a pride in the American past, a faith in the American future.

We can be thankful that this situation exists, especially now that the tragic possibility of a third world war looms on the horizon. But at the same time we cannot be lulled by past success. We must face the fact that a clear and present danger still exists here on the home front. That danger is the trend toward state Socialism—a trend which has been exposed but not eliminated, slowed but not stopped.

It is therefore imperative, in my opinion, that both doctors and laymen keep in mind the dismal lessons of recent history, and the unpleasant facts of the present. In other words, we must watch both the forest *and* the trees.

The lessons of history are that both World War I and World War II set the stage for drastic internal changes in many nations. In a number of cases, those changes either killed or restricted freedom. The First World War, for example, was the catalyst for the development of Russian Communism, Italian Fascism and German Nazism. The Second World War, more recently, brought the emergence of Socialism in freedom-loving Britain, the fall of the Iron Curtain on the European Continent and the surge of Communism in China and other Asiatic countries.

The unpleasant facts of the present are that today—behind the scenes right here in America—there are people who would like to change the basic structure of this nation. Lurking in the background of American life there are—as I said in my San Francisco inaugural address—"little men whose lust for power is far out of proportion to their intellectual capacity, their spiritual understanding, their economic realism of their political honesty."

These men of little faith in the American people—I pointed out in my presidential address—seek socialized medicine only as a first goal. Their real objective is to gain control over all fields of human endeavor and make this a Socialist state.

In that connection I should like to repeat one more statement I made in San Francisco. It is this:

"There is only one essential difference between Socialism and Communism. Under state Socialism human liberty and human dignity die a little more slowly, but they die just as surely!"

Keeping in mind all of these factors—the lessons of the past and the realities of the present—there can be only one logical course of action, for us doctors and for all Americans who value freedom. That is a continued, vigorous, expanding mobilization of faith—a spiritual rallying of all those who believe in the American way of life and are determined to preserve it—a constant vigilance that will make this nation invulnerable to all enemies of freedom, wherever they are.

To help bring about such a sweeping reaffirmation of faith—a rousing people's mandate for Americanism—will be the primary objective of medicine's nationwide advertising program in October. Utilizing every bona fide daily and weekly newspaper in the country, some thirty national magazines and more than 1,500 radio stations, that program will carry our message of freedom to every American. Also participating, with paid space of their own, will be thousands of individuals, companies and groups whose advertising will echo the same basic theme. I urge all of you to do everything you can to help this major effort become a history-making success.

Another vitally important phase of the action which I consider necessary, is the participation of individual doctors in the elections this fall. Many doctors all over the country already are exercising their political rights as individual citizens. Regardless of their previous party affiliations, they

are working actively for all candidates—whether Democrats, Republicans or Independents—who sincerely believe in fundamental American liberties, and who are determined to preserve those liberties. Again, for the sake of freedom in medicine, and freedom in the entire American future, I urge all of you to do likewise.

For we find, as American medicine looks ahead in this period of world danger, that we no longer can confine ourselves to a long-range professional progress. We find that before American medicine can move ahead to the great accomplishments which will be possible in future decades, it first will be necessary to concentrate on an urgent, immediate task. That task is to safeguard freedom now, in the months and years immediately ahead, so that there will be a future—for doctors and all Americans.

I am confident that American doctors—in their capacities as both medical men and citizens—will do their part. And I am confident that the American people, with God's help, will overcome the present threat to freedom—both at home and abroad.

My remarks are for doctors generally. I might make some remarks here in the presence of doctors that I would not like to make over the radio. For that reason I reserved some remarks until after I talked on the radio.

The other day a memorandum came across my desk from one of the leading dentists of the country. He made the remark in a rather critical way that in my talks before groups throughout the country I failed to include dentists. I do not think we have any dentists here this evening, but when I talk about doctors I include physicians and dentists. The dentists are somewhat sensitive. Sometimes they are critical if you refer to "physicians and dentists." When I talk of the medical profession I naturally include the dentists. When I talk of the fight against socialized medicine and socialization in general I speak of all of our allied professions, because we need all of our allied professions, and they are grouped with us and should fight right along by our side. The druggists throughout our country as well as the dentists are doing a splendid job; they are co-operating with us 100 per cent in our fight against compulsory health insurance. I say they are fighting and co-operating 100 per cent. I mean insofar as the doctors are concerned. You must remember that we have a certain group of doctors in this country who are not co-operating 100 per cent.

I have here a little pamphlet that I would call to your attention too. Probably some of you have seen it, and also this other pamphlet. They look just the same from where you are sitting. They are just the same, except for the frontispiece. For instance, this pamphlet was put out by the Committee for the Nation's Health, known as the National Health Insurance Handbook. "A Practical Guide for Leaders," Committee for the Nation's Health, 1416 F Street, N. W., Washington, D. C.

Here is the same booklet, with the title, "Administration's Health Program," Training Kit for Leaders, Democratic National Committee, Ring Building, Washington, D. C. That booklet has been sent out all over the country to Democrat workers, throughout the states and counties and precincts of this country.

Now, gentlemen, I am not a partisan politician. The truth is that I have been registered a Democrat as long as I have been able to vote but not a Socialist Democrat. We certainly have plenty of them in this country. If we are to fight socialism we have got to fight the organizations that are getting out and fighting us. Any other course would be a tragic betrayal, not of our profession but of the American people. I urge all of you to get out and fight for the men who are willing to stand up for the American way of life, for the American principle, not only in medicine but in all stems of American life.

American medicine is stronger today than ever in the history of American medicine. We have more unity in the medical profession today than ever in the history of our profession. That has required a lot of work; it has necessitated overcoming many problems. However, you do not hear today the bickering in the medical profession that you heard a few years ago.

The doctors of this country can control any election if they get out and work at it. I think the results of the election in Florida and also in North Carolina thoroughly demonstrate that. In Florida a great many people thought it would be impossible for them to defeat Senator Pepper, but he was defeated. The doctors and their wives and their office help and the allied professions, the dentists and their wives and the pharmacists, all of them went in together, and don't forget the Women's Auxiliary. They did a wonderful job down there,

(Continued on Page 1287)

President's Address

By W. E. Barstow, M.D.

St. Louis, Michigan

IT WOULD BE difficult to hold the presidency of the Michigan State Medical Society without acquiring a sense of deep humility.

Without the fellowship, generous assistance, and genuine co-operation of all participating in our work during the past year, little could have been accomplished.

Having had such help, I can remember our work with some satisfaction. I am extremely grateful to those who have made that work possible.

The problems faced by the society have been many and serious. It would be pleasant to talk of a finished job, but most of our program just hasn't presented matters capable of immediate or final solution.

A most important example of the long-range nature of these problems has been our defense against political medicine proposals and anti-trust investigations by our national government.

These attacks have obviously been attempts by unprincipaled men to control and administer medical services as a vote-getting tool, and are therefore extremely dangerous.

They are aided by dreamers who feel that just a little more governmental planning and regulation would solve everyone's troubles.

Someone has suggested that if the "Fair Deal" administration is so insistent on establishing a bureau to improve medical services, it might best create one dedicated to seeing that the medical profession is left alone by the overpaternal government and carpet-bagger politicians.

Most doctors are inclined to agree with this hypothesis. We believe that Americans appreciate their traditional democracy, and fear the obvious freedom-strangling effects of Socialism in the welfare state pattern.

We further believe there is nothing wrong with medical services that more doctors and voluntary insurance plans won't cure.

The CAP program of our society was designed to publicize the fact that recent compulsory health insurance proposals are just disguised Socialism, and to persuade everyone to vote accordingly, but especially to vote. It has met with a good degree of success. But the work of the past is only a foretaste of the work necessary for the future.

A second major phase of our work has been general public relations. The medical profession merely wants the public to hear and evaluate the truth, but years of bitter experience were needed to teach us that we must enter actively into public relations work in order to be certain that the truth is available to all.

Much of our recent public relations work has been devoted, of course, to the fight against socialism. Nevertheless, mediation of problems arising from the physician-patient relationship, and encouragement of constructive state legislation, have received competent attention.

The program of continuing and extending postgraduate educational facilities has been rewarding and worthwhile. Co-operative work in diagnosis and control of heart disease, cancer and rheumatic fever has been a nationally outstanding example for the handling of problem areas in our own professional field.

But much still remains unaccomplished. While we have given the society a year of hard work, we leave also a legacy of still more work ahead.

Like the practice of medicine itself, officership in the Michigan State Medical Society merely provides an opportunity for public service.

Our reward lies in the knowledge that next year's program will be in such able and willing hands.

Presented at the General Assembly, Wednesday Evening, September 20, 1950, at the annual session of the Michigan State Medical Society, Detroit.

MSMS

Any American fighting men wounded in Korea are being evacuated by air, if armed forces plans revealed to the American Medical Association are being followed.

Hospital trains and hospital ships are out, in military medical planning. As long ago as last August (1949), air evacuation was adopted as "the sole method of patient movement for the armed forces, replacing hospital ships and hospital trains," Lieut. Col. B. A. Strickland, director of the military medicine division of the Air Force School of Aviation Medicine, announced.

Over 1,423,263 patients were evacuated by air between 1942 and 1949, he reported. Since 1945 only one death has occurred in air evacuation.—*Science News Letter*, July 8, 1950.

Ten Per Cent N-ethyl-o-crotono-toluide Ointment in Treatment of Scabies Infestations

By Eugene A. Hand, M.D.

Saginaw, Michigan

CHEMISTS[1] of the Dow Company found, after studying many organic toxicants by the Peet Grady method of determining the knock-down and kill percentage on five-day-old houseflies, that the addition of a N-hydrocarbon-substituted crotonamide to rotenone, pyrethrin and derris root greatly increased the ability to knock down and kill. They studied a large number of these crotonamides, in combination with rotenone, pyrethrin and derris roots extracts and many were found to be non-irritating and free of offensive odor.

Domenjoz,[4] from a study of the acaricidal properties of over 1,100 new synthetized products *in vitro* on Psoroptes Cuniculi, the scabies mite in rabbits, found a number of excellent arcaricidal agents. Of these N-ethyl-o-crotono-toluide, ethylamide of the p-chlorobenzene-sulfonic acid, and 1) p-chlorophenoxy-2-oxy-3-chloro-propane after therapeutic experiments and tolerance tests in infected rabbits, guinea pigs, rats, mice were deemed safe for human experiments.

Burekhardt and Rymarowicz[2] in a clinical trial on humans with these three preparations dropped the last two due to secondary symptoms such as dizziness and headaches. With 10 per cent N-ethyl-o-crotono-toluide in a ointment base they observed no secondary symptoms. They treated a large number of scabietics with this ointment with excellent clinical results. In their practice this odorless clain ointment promptly cured scabies, and was nonirritating even to the eczematous and pyodermatous skin.

These excellent results have been confirmed in this country. Tronstein[6] treated six persons with severe and fourteen with mild scabies by a single application of Eurax with 90 per cent cure. He treated twenty-two with severe and sixty-seven with mild involvement by two applications with only one failure. Couperus[3] treated seventy-seven cases of scabies with 10 per cent N-ethyl-o-crotono-toluide in a washable vanishing base with 100 per cent cure. He reported no local or systemic reactions. Patch tests on over 100 people were negative.

Clinical Studies

The diagnosis of scabies was made clinically in eighty-six private patients. These included all age groups. The youngest was four months and the oldest seventy-six years. Half were males and half females. All were white except for a few Mexicans. Scabies in negroes is rare in this area.

In each case an attempt was made to find the acarus elements such as the female adult, the hexapod larvae, the eggs empty or full, skeletal parts, or the scyballe using the slice, scrape, and smear method.[5]

Technique of Confirming Scabies Diagnosis Microscopically

It is best to make a careful search over the parts affected to pick out lesions that will most likely give a positive diagnosis. Ordinary rules of cleanliness and asepsis should be followed. For lesions on the fingers, on the interdigital webs, on the hands, wrists, and axillae, a sterile razor blade is used to shave off a very thin slice of the vesicle, burrow or excoriated papule. For lesions on the abdomen, genitalia, buttocks and other parts less easily reached, scraping of the lesion with sterile razor blade or Bard-Parker knife is best. The thin slice of epidermis, or the scraping, is then placed on a glass slide, covered with a cover slip, and mounted in 10 or 20 per cent potassium hydroxide solution. The slide then is examined under low power, using the high power when needed.

The clinical diagnosis was confirmed microscopically in seventy-two cases. In the other fourteen possibly due to recent treatment with sulphur and/or benzyl benzoate the acarus elements could not be found. These cases were excluded from this series.

In a number of negative cases in which the diagnosis was in doubt, a test of treatment with 10 per cent N-ethyl-o-crotono-toluide was given. The non-irritating properties of this preparation made this a safe procedure, which was never true

with the older scabietic treatments such as sulphur and benzyl benzoate. A 10 per cent ointment made of N-ethyl-o-crotono-toluide in a washable base,* was used in treating most of the patients. I have always preferred to write my own prescriptions, changing the percentage of the active ingredients and the base to fit the patient. N-ethyl-o-crotono-toluide could not be obtained commercially. The Dow Chemical Company synthetized this preparation for my use. This compound was incorporated in 5 and 10 per cent strengths in aquaphor, cold cream and petrolatum. These mixtures have remained stable over a period of one year both in the ice box and at room temperature in variable Michigan weather. My results with these ointments and the ointment furnished by the Geigy Company of New York have been identical.

The patients were instructed to bathe and then apply the ointment all over from the neck down. In babies and young children with face and scalp involvement, these areas were also treated. The ointment was applied in a similar manner on the second and third day without bathing. On the fourth day after bathing the use of fresh clean sheets, pillow cases and garments was advised. In a few cases a second short course to the affected areas only was used.

The seventy-two acarus-positive scabietics treated by this method consisted of forty mild cases and thirty-two severe cases. Eight of the seventy-two had had previous treatment and already showed dermatitis with some eczematization. Sixty-four persons were adequately followed for from two months to a year. The other eight were followed for at least two to four weeks. They were contacted by mail and urged to return at no expense for reobservation and further treatment if necessary.

Sixty-three (98.4 per cent) of the sixty-four adequately followed cleared and remained well with this treatment. There was a strong possibility of reinfection in the one failure in that the father refused to co-operate and treat himself.

There were no systemic reactions and only minimal irritation in the cases treated.

Summary and Conclusions

Seventy-two acarus-positive scabietic patients were treated with 10 per cent N-ethyl-o-crotono-toluide ointment with three applications; 98.4 per cent of those adequately followed were rapidly cured. The side effects such as dermatitis, eczematization, were minimal. There was no systemic toxicity.

I have used "Eurax" on twelve cases of pediculosis pubis with quick easy cure in each case. It was especially useful in treatment of cases with nits and pediculi on the eyelashes.

*This ointment was supplied by the Geigy Company, 89-91 Barclay Street, New York, N. Y., and is marketed under the name Eurax.

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AMERICAN MEDICINE LOOKS AHEAD

(Continued from Page 1284)

and they can do a wonderful job anywhere they are called upon to do a job, if you let them do it. If we just get out and do the job we can control the elections in this country, and that is the only way we are going to be able to defeat socialism in this country.

You cannot do that as a medical organization, as a medical society, but you can do it by organizing committees of doctors in various communities, doctors in the allied professions, such as political action committees made up of physicians and the allied professions. You can get out and really work and accomplish something. In Florida they had a letter-writing campaign. All the doctors who were interested wrote letters to all their patients. The letters were prepared and signed by the doctors in their offices and sent out over their signatures. The women went out from door to door and worked during the campaign. On election day most of the doctors closed up their offices and they and their wives used their cars to get the voters out. Those are the things that must be done if we are to control elections.

As I said before, I am not talking about any party affiliation. There are good men in all the parties, but there are socialistic men in most of the parties. It is our duty not only to preserve the American way of practicing medicine, not only to fight for the freedom of medicine, but for freedom of all Americans.

Psychiatry and the Driver

All Types of Vehicles-Land, Sea and Air

By John A. Larson, M.D.

Logansport, Indiana

A PROBLEM: With the ever-increasing traffic hazard, the importance of the handicapped driver becomes more and more real and requires detection and correction. With but rare exceptions, very few organized attacks have been made upon this acute situation by psychiatrists and psychologists. Unfortunately, although these studies are of tremendous value, there have been relatively few follow-ups, and much remains to be done. The purpose of this paper is primarily historical and for orientation—mentioning a few key contributions by psychiatrists, clinics, state laws, and how the state hospitals can assist.

In the studies published, every variety of viewpoint can be seen. One examiner in a general objective survey may show the importance of feeblemindedness, alcoholism, physical handicaps. Another examiner may emphasize, as the major factors, conflicts and stress—primarily psychogenic factors as viewed by the Freudian psychoanalyst. Another, as Selling of Detroit, formulated new psychiatric nosological criteria—Parapsychosis A and B—in his attempts to find the etiological mechanism in the driver. All are interested in the so-termed "accident-prone" driver—whether air pilot, locomotive engineer, seacraft skipper, or bus driver.

The traffic policeman focuses on speed and reckless driving. The police chemist emphasizes alcoholic impairment. The psycho-physical tests of the psychologist, employed in the examination of driving offenders, alone may be inadequate unless integrated by over-all psychiatric evaluation. Working unaided, focusing his attention on a single criterion, each worker viewing the problem in the light of his own specialty may overlook important factors and make erroneous interpretations and take wrong legal action.

Since the conclusions will depend upon the previous bias or conditioned training of the examiner, for convenience, the writer will orient his discussion from various phases of his own contact with this problem as follows:

Biological and Physiological Laboratory.—Methods of investigation, influence of heredity, race nutrition, drugs, endocrine, et cetera. Teaching and graduate research in medical schools—A.M. and Ph.D. theses concerning dactyloscopic, psychopathologic, endocrine, et cetera, factors. (A.M. thesis, "Hereditary and Fingerprints"; Ph.D. thesis, "Functional Correlation Between the Hypophysis and The Thyroid").

Pioneer police work—police psychiatry in Berkeley, California.—Four years as police investigator at Berkeley, Calif. (while doing graduate work). Introduction of a deception test and fingerprint system into police and judicial procedures. (Some of the writer's experiences at Berkeley, beginning 1921, were later summarized in *Lying and Its Detection,* in collaboration with G. Haney and L. Keeler, University of Chicago Press, 1932; various articles have appeared in legal, psychological, and psychiatric journals; a book, *Larson Single Fingerprint System,* Appleton, 1923).

In addition to the introduction of scientific methods of criminal investigation in the U. S., years before the establishment of the present Federal Bureau of Investigation in 1924, Vollmer combined these with the study of the offender. He utilized the services of a police psychiatrist, Dr. Jau Don Ball, in private practice. Dr. Ball gave courses in police psychiatry at the University of California, including demonstration clinics in the various California state hospitals. He also did psycho-physiologic studies of police officers and assisted Vollmer in the development of the Coordinated Council, later to be used throughout the country. (When Ball left Berkeley, he was followed by Dr. Chester Rowell, a neuropsychiatrist). Much of the pioneer work was done between 1915 and 1923.

Not infrequently in the past, psychiatrists discussing sex and motor-vehicle laws—whether in police courts or prison clinics—have utilized a "one premise" or "factor" approach, depending upon their major training. Few of them integrated their later, perhaps exhaustive, analytical account by the offender with the details of the act at the scene of the crime or accident.

Vollmer introduced the Atcherly Modus Oper-

Dr. Larson is superintendent of the Logansport State Hospital.

andi of England into routine U. S. procedure prior to 1921. In addition to the various criminal classifications, he devised one for traffic accidents and offenders. Also, whenever necessary, individual psychiatric examinations were made of the driver. Of those handled by the local police, the writer had the opportunity to make routine M.O. investigations of both criminal and traffic offenders.

The success of the M.O. in criminal investigation is based upon certain factors. The more important is a stereotyped form of behavior, which, in turn, is dependent upon personality factors, alcoholism, feeblemindedness, psychosis, psychosexual deviation, education, religious tendencies, et cetera.

About this time, Adolf Meyer and Hermann Adler, separately observing some of the Berkeley studies, later gave the writer opportunity to continue some of these studies—as research psychologist and later psychiatrist in the Illinois Division of the Criminologist where, at times, it became necessary to examine as many as two to 500 possible parolees a month and, under Meyer, to make exhaustive studies of types of offenders.

It was after the receipt of the following letter from Meyer that the writer decided to trace, according to subject material, some of the leading influences involved in such police forensic problems as the sexual and traffic offenders.

ADOLPH MEYER, M.D.
4305 Rugby Road
Baltimore 10, Maryland

April 22, 1947

Dr. John A. Larson
Arizona State Hospital
Phoenix, Arizona

Dear Dr. Larson:

Evidently you are in an interesting post, in which you might be able to give me some orientation as to the lay of the land. I am myself interested in making a kind of summing up of my perspectives, in which I should like to include wherein my Rush article heads towards a rejuvenation of a basic principle.

It is obvious that Rush was a kind of independent spirit, perhaps onesided in his sticking to his Edinburgh training. However, owing to the fact that he remained a bloodletter and not a worker on "the person," his objectivity remained anecdotal rather than what we now would like to develop into real personality studies. On the other hand, he used chance memories as more valuable to real contact with the patient, a method which did not rise to the objectivity based on personality study such as the one I hoped to cultivate and make the setting of the scientific—*and logical*—methodology which derived from our American philosopher Peirce, who inspired the historians, Robinson and William James and John Dewey and, I might say, even Bridgmen, the physicist. This evidently is what I had in mind when I wrote my contribution to the Education Conference of 1936, culminating in the discussion of "sense."

I feel that in the fundamental interests in the cause of an independent American perspective, we have something in common, and I should be grateful for a kind of naïve or factual account of the events of a life along the lines which you have sought out. I think I should find material which fits well into the philosophy of ergasiology in the sense of what a history of the word means to me and intends to suggest.

I should have liked to spend some time at Berkeley to learn what happened behind the superficial developments in the life of the contributors, rather than their doctrinal dogmas. When I met you at Berkeley, I was only remotely acquainted with Tolman, Kroeber, Ball, the MacFarlands, and the present group, Reichmann, Brunswick, and the other members of the philosophy of science group, and the untiring pathfinder, Dr. H. M. Evans.

I wish I could get you to reminisce and to let me have the lines of association that express themselves in that indefinable interplay of data—which I think reaches expression in this "Revaluation of Rush." I should deeply appreciate whatever you can revive in that residue that wakes up only in a mood of reminiscence.

With best wishes,

Sincerely yours,
(Signed) Adolf Meyer

Psychopathic Clinic, Recorder's Court, Detroit, was founded by Dr. Jacoby in 1919. The work of tremendous importance carried on since this time preceded similar work in the Chicago Municipal Clinic of Hickson, Solomon, Rotman, and others; the Behavior Clinic of the Chicago Criminal Courts, similar clinics established by Oliver in Baltimore, by others in Cleveland, Bellevue Hospital, Pittsburgh, et cetera. Here in these clinics, all interested agencies refer cases contacting probation workers, police and court officials before or after arrest or conviction. In most of these clinics, the opinions submitted (as in prison-classification clinics) are advisory only but are followed in many instances.

The first published paper in this country dealing with an integrated clinical study of the traffic offender referred to Court was "One Hundred Traffic Offenders" by Raphael Theophile, M.D., LaBine, Alfred C., Flinn, Helen L., and Hoffman, L. Wallace, Psychopathic Clinic, Recorder's Court, Detroit, Michigan; *Mental Hygiene,* Vol. 13, No. 4., Oct., 1929. Reprinted by National Committee

for Mental Hygiene. Among their interesting results were (p. 7 of the reprint):

"As regards the occurrence in really significant degree of traits definitely handicapping in personal and social relations, the following were noted:

Markedly Inadequate and Suggestible	48
Lacking in Alertness	41
Emotionally Unstable and Impulsive	57
Excitable	26
Immaturity of Attitude and Response	14
Unreliable or Undependable	28
Egocentric	31
Lacking a Proper Sense of Responsibility	45
Actually Antisocial in Attitude and Tendency	3

"This gives a total of 293 handicapping traits for the whole group, or a hypothetical average of 2.9 per individual."

Again:

"As regards general insight into traffic regulations, as determined by perfomance in connection with certain specific problems and familiarity with traffic regulations, 43 per cent were noted as definitely unsatisfactory, with 31 per cent acceptable and 26 per cent doubtful."

The authors, also, found that fifty showed such delayed reaction time that this would interfere in actual driving. Of significant findings in the summary, the following are noted:

"12 were definitely feebleminded.
42 were classified as of inferior intelligence.
1 was psychotic or insane.
1 showed an active epileptiform tendency.
46 were seriously handicapped by alcoholism.
2.4 was the median number of previous difficulties.
13 were acceptable as drivers on a liberal evaluation."

Many of these offenders were seen routinely by the writer (assistant director of the Clinic 1936-42). It was during this time that Alan Canty (then psychologist and now executive director) of the Clinic (Psychopathic Clinic of the Recorder's Court of Detroit), established the traffic division, introducing psychophysical tests, which for years he had used in the examination of employes or the Cleveland Street R.R. In addition to the usual physical, psychological, and psychiatric examinations, the following tests were included:

Depth Perception
Glare Sensitivity
Eye Tests
Color Vision
Perimetric Vision
Judgment of Speed and Distance
Reaction Time
Miniature Highway
Traffic Laws
Road Test by the Police Department

Canty summarized some of his findings in "The Case Study Method of Rehabilitating Drivers," *Journal of Social Psychology,* 12:171-278, 1940; received in the editorial office April 18, 1939. He presented this data at the annual meeting of the American Psychological Association held in Columbus, Ohio, September, 1938. Canty selected 500 cases for analysis.

Canty found (p. 272) upon using a control age group of drivers, non-clinic cases, the figures show that while 5 per cent of these 4093 Michigan drivers were over sixty years of age, only 2.4 per cent of our clinic cases were in this same classification. Also, the largest number of cases in each tabulation is between twenty and twenty-nine years of age. However, a greater percentage of clinic cases are in this age range than in the larger group—the comparative figures being 36 per cent for the clinic cases and 28.59 per cent for the control group.

In comparing these two groups, Canty found that the younger group had greater educational advantages—high school and college. Comparing the results of intelligence tests, he found (p. 273):

"Among the younger individuals, we learned that a predominantly large percentage are in the average section. This is not true among the 320 offenders; and again we found that there are a larger percentage of the younger individuals in the superior and very superior groups than is the case when considering older violators. Most remarkable is the fact that 41.25 per cent of the 320 group is feebleminded as compared to 26.67 per cent of the younger individuals. For the 180 cases the median I.Q. is 83 with a range from 43 through 122. For the 320 section, the median I.Q. is 75, with a range from 31 through 119. For the 500 cases as a whole, the median I.Q. is 77 with a range from 31 through 122."

Canty, also, found that in fifty-one of the 500 cases, alcoholism had been "the major or a contributing factor towards the patient's social maladjustment." He, also, found that 131 cases or 26.2 per cent were suffering from serious physical deviations. Hypertension, syphilis, and generalized arteriosclerosis formed seventy-six of this group; cardiac, hyperthyroidism, and epilepsy constituted another fourteen; eleven of the total group were actively psychotic, and eleven showed other psychiatric defects.

Lowell Selling, M.D., presented Canty's tabular

findings in three of the tables (acknowledging credit to Canty) in a brief paper read at the annual meeting of the American Psychiatric Association, May, 1939, and published in the *American Journal of Psychiatry,* Vol. 97, No. 1, July, 1940. His usage of the Intelligence Quotient material is rather confusing as he only refers to the total group and does not show the important age differences found by Canty. Dr. Selling described two cases, given him by Detroit psychoanalysts, Dr. Harry August and Dr. J. Clark Moloney, in which compulsive-impulsiveness apparently played a role —in one instance driving into persons in a safety zone, the other instance running into traffic policemen. Fortunately, then, Canty's findings of 500 cases were presented before the two major groups within a few months of each other.

Some nine years later, a paper* covering the same problem was presented at the May, 1949, Annual Meeting of the American Psychiatric Association held at Montreal. Here, the emphasis of the discussants was primarily psychoanalytical. Dr. Selling referred to his work when a member of the Clinic in Detroit. He spoke of the existence of a psychosis found in traffic offenders—Parapsychosis A and B—although his findings have never been confirmed.

Role of Epilepsy, Electroencephalic diagnosis and Legislation

While giving a two months' course (1939-40) to the ranking police officers of Honolulu, where I instructed the class in case study, reports and criminological diagnostic methods, examining police clinical material at the Queen's Hospital in the morning and presenting the material in a two-hour class in the afternoon, and later in 1944 evaluating the work of the E.E.G. with a Los Angeles neurosurgeon, Mark Glasier, it was emphasized that forensic test results—chemical, deception, drug tests, et cetera—were not diagnostic alone but had to be integrated into a complete psychiatric analysis. In 1944, the writer was assisting in the evaluation of 100 questionnaires returned to Dr. Glasier by leading U. S. neurologists. This work was precipitated by the problem raised as to whether the results of an electroencephalic examination alone would warrant diagnosis of epilepsy, so that predicated upon this finding under California statute the driver's license could be revoked. Carter, W. E., and Harvey, R. W., described this law in "Epilepsy—A Reportable Disease," *California State Department of Public Health Weekly Bulletin,* 18:28, (Aug. 5) 1939. Himler, elsewhere, discussed this general problem aside from that of diagnosis in "Epilepsy As A Traffic Hazard," Journal of the Michigan State Medical Society, September, 1941.

The California law requires revocation of a driver's license following a convulsive episode. It was then necessary for the driver to have neuropsychiatric treatment and a letter before his license could be returned to him. The question raised by some California officials was whether an electroencephalogram could be taken routinely and the diagnosis made upon this alone so as to affect the legal status. The writer's opinion, based upon the answers to the questionnaires, was that the interpretations of the test results alone were not decisive as far as any legal action is concerned but must be supported by history and other clinical findings.

Released State Hospital Patients as Driving Hazards

Many states require a statement from the driver as to whether he has ever been a patient in a mental hospital. In some instances, as in California, a fingerprint check is required. In this connection, Himler wrote, "The provisions of practically all the forty-eight states possess operators' license laws which include some type of restriction against individuals who are unfit to drive. Michigan's Act 91 of 1931, which is patterned after the so-called Uniform Motor Vehicle Operators' and Chauffeurs' License Act, expressly prohibits licensing anyone who is 'afflicted with or suffering from such physical or mental disability as will serve to prevent such person from exercising reasonable and ordinary control' while operating a motor vehicle upon highways. License is also withheld from any person who has been adjudged by the courts to be 'insane' or an 'idiot, imbecile, epileptic, feebleminded' and who has not been restored to competency by judicial decree. Even then a driver's license is not granted unless and until the department given the responsibility for issuing licenses is satisfied that the individual is capable of operating a motor vehicle with safety to persons and property."

The problem presented by the discharged mental patient has not been dealt with in any of the

*"The Accident Prone Automobile Driver," W. A. Tillmann, M.D., and George E. Hobbs, M.D. Discussed by Lowell S. Selling, M.D.

papers discussing traffic offenders, except stating that the committed patient must be restored to competency. Himler, in the above reference, gives this more attention than others.

State laws may differ as to the type of discharge and the manner in which this may be secured, and, as in the Indiana State Hospital at Logansport, there may not be over five or six per hundred who are given a restoration to mental health yearly. No problem is presented by the patient on furlough or parole in most states, as far as the principle of not allowing a driver to have his license while on parole is concerned. However, in reference to the types of discharges in Indiana, restoration of legal rights must be through court ation in all cases regardless of type of discharge. It should be possible as in other states, for all patients who are given a discharge from a state hospital or from a commitment to have their legal rights restored. The exceptions should be in cases such as mental defectives and others who may be obviously incompetent but who may have recovered from their acute episode, but who will require the appointment of a guardian. This includes the present, unpsychiatric condition for discharge, "incurable and harmless." This classification is foreign to all psychiatric principles and should be abolished.

Those of us who have been most actively connected with traffic problems of police psychiatry, not in the court clinic, office, or institution, but from field contacts, know that the problem of the mentally ill driver is much more acute than is commonly recognized and has many ramifications. Many states will bar the epileptic, the actively psychotic, and the committed patient. There is some disagreement about the feebleminded—one psychiatrist insisting that the feebleminded make the best drivers. Such a statement is contrary to ordinary common sense, much less formal psychiatric principles. It is too late after the patient—furloughed or discharged—has killed to do much with him except what intelligently should have been done before. Many discharged patients are going to have relapses. There is no reason why these patients cannot be just as carefully scrutinized as epileptics, who in some states can have their licenses returned after they have been without seizures for two years. How are these patients to come before the attention of the state traffic motor vehicle departments? If this is done, what about privileged communications This latter question has been succintly discussed by Monrad Krohn (in Himler's paper) and is not of such importance that it has interfered with the forced reporting by the physician of patients with epilepsy or the reporting of communicable diseases. Naturally, any information given must be treated confidentially. In the cases of committed patients there is not the objection as in the case of the private physician who might raise the barrier of privileged communication to the reporting of a condition in the course of his private practice after the patient has solicited his help without this condition having been detected following a seizure while driving, et cetera. In the first place, all commitments are publicly recorded and access may be secured to the papers by anyone. Secondly, public official action has to be taken in some states, as in Indiana, before release, including both discharge by the superintendent and court action. Then, again, the public is entitled to the protection that can be secured by psychiatric recommendations given confidentially to the motor vehicle department with each discharge. The stipulation is that this information is confidential for official use only. If the suggestion is followed, before the refusal to return the license is made, the driver is referred to his own physician or psychiatrist, who may find him able to drive or request a period of supervision before the license is restored.

Aside from the obvious physical contraindications—deafness, marked visual disturbances, paralysis of such a nature as to interfere with judgment or physical manipulation of the car, night blindness, marked disturbances in reaction time (not infrequent with the feebleminded)—there are certain recurrent hazards which are not eliminated by the mere discharge of a patient from the committed hospital. Regardless of academic wranglings as to etiological causation of schizophrenia, as types, and especially the manic-depressive groups, we know that there may be recurrences anytime. These groups warrant psychiatric or other observation as much as the epileptic (also the tabo-paretic or paretic groups, in which convulsions or cardiac collapses may occur without warning). In securing an opinion from leaders as to the type of coma-insulin preferred, the etiologic bias could be seen in some. These only saw value in that insulin therapy in the different stages of coma might cause the patients to produce fantasy or other material later to be used psychotherapeutically. One enthusiastic analytical group, in attempting to explain the beneficial effects of elec-

tro-convulsive therapy, spoke of the experience being of value because it was received as a death phenomena by the patient. Even if primarily of psychogenic origin, with which the writer and those who have seen many patients—living, during necropsy, laboratory results, or viewing the "wet-brain" during psychosurgery—cannot agree, there is such a variance of symptomatology which would make the patient a dangerous driver. If, on the other hand, we consider schizophrenia as organic in character—whether due to endocrinological, allergy, virus, bacterial, or a combination of all—we can then envisage the now questionable nosological groups—catatonic, paranoid—as being but various stages of the same disease. The symptoms vary with the amount of organic damage, character—whether irreversible, et cetera. Naturally, psychogenic factors and psychotherapy are important; especially environmental factors needed in rehabilitation after any form of drastic therapy which, at least, makes the patient temporarily more therapeutically accessible. These same factors or problems are present with other organic brain conditions, cerebral arteriosclerosis, paresis, et cetera. Some years ago when at Baltimore, a friend and former colleague, Paul Schilder, gave the writer his book on the psychotherapy of general paresis. One of the writer's first intensive cases in 1928 was a manic patient (manic-depressive category) who in his precommitment frenzy drove recklessly at top speed until a catastrophe occurred. In Arizona, a little over a year ago, a patient (diagnosis, schizophrenia, simple type) was transferred to the Veterans Hospital from the Arizona State Hospital and, while released on a visit, drove at top speed through a stop sign into a bus, killing six including himself.

On several occasions, Mr. Travis of the Arizona State License Bureau asked advice about former patients. The risks, especially of paretics, were pointed out, and it was advised that before granting restoration of license, the prospective driver be examined by a physician, preferably a neuropsychiatrist. The terrific risk of chronic alcoholics was pointed out. In one instance, it was necessary to discharge such a patient who had been committed for a thirty-day period of observation only. He was placed upon a bus going to New Mexico. He got off, became drunk, stole and wrecked a car. This case could be multiplied. Not long ago, a patient was committed to the Logansport State Hospital. This man had had previous drunken driving charges against him and prior to this commitment had threatened to kill officers.

Finally following the suggestion of the writer, then superintendent of the Arizona State Hospital, Mr. Travis requested that the state hospital supply his division with the names of all patients when finally discharged. This matter was referred to the Hospital Board, but the request was denied. Months later, the writer, now superintendent of the Logansport State Hospital, received letters from Mr. Mahlon Leach, division director, and Mr. B. B. McDonald, assistant director, Bureau of Motor Vehicles, Division of Safety Responsibility and Driver Improvement. The writer answered these requests by submitting a psychiatric impression of the discharged patient, as far as driving hazard was concerned, to the Hospital Board of Trustees and the Indiana Council for Mental Health. The Board Members unanimously agreed, as did the Council, that the information should be submitted to the Bureau of Motor Vehicles. (See letters below from the Bureau of Motor Vehicles and the Indiana Council for Mental Health):

BUREAU OF MOTOR VEHICLES
State of Indiana
Indianapolis, Indiana
July 26, 1949

Dr. John A. Larson, Supt.
Logansport State Hospital
Logansport, Indiana

Dear Dr. Larson:

The law under which the Bureau of Motor Vehicles operates provides how drivers' permits and licenses are issued. Section 47-2704, BRS 1933, 1940 Replacement, Acts of 1945, Chap. 304, Page 1308 sets out the persons not to be licensed. This section provides as follows:

"The department shall not issue any license or permit hereunder: (d) To any person who has previously been adjudged insane, feebleminded, or an idiot, imbecile or epileptic and has not at the time of application been restored to competency by judicial decree, or released from a hospital for the insane or feebleminded upon a certificate of the Supt. of such hospital that such person is competent, nor then, unless the Commissioner is satisfied that such person is competent to operate a motor vehicle with safety to persons and property."

In order for the Commissioner and the Bureau of Motor Vehicles to better carry out the mandate of this Act, would you kindly furnish this office your certificate of the persons released from your institution as being restored to competency.

We would appreciate such a certificate from January 1949 and from month to month thereafter.

Very truly yours,
(Signed) B. B. McDonald
Assistant Director

BUREAU OF MOTOR VEHICLES
State of Indiana
Indianapolis, Indiana
August 8, 1949

Dr. John A. Larson, Supt.
Logansport State Hospital
Logansport, Indiana
Dear Doctor Larson:

As you know this Agency is charged with the responsibility of issuing driver's license and registrations.

Contained in the driver's license application is the following question: "Have you ever been adjudged insane or confined to an institution?"

Applicants for license who have been so confined or adjudged, frequently answer "no." It would be most helpful to the Commissioner, if upon release of any inmate from the institution the Superintendent thereof would notify this Agency of this fact and also whether or not in the opinion of the Superintendent, such inmate released is competent to hold driver's license.

Should the Superintendent see fit to co-operate with the Agency in this matter in the interest of public safety, all such information will be placed and held in absolute and strict confidence.

May I hear from you? With kindest personal regards, I remain

Respectfully yours,
(Signed) Mahlon Leach
Division Director

* * *

INDIANA COUNCIL FOR MENTAL HEALTH
RADIO CENTER
INDIANA STATE FAIRGROUNDS
INDIANAPOLIS 5, IND.
September 15, 1949

Dr. John A. Larson, Supt.
Logansport State Hospital
Logansport, Indiana
Dear Doctor Larson:

The Council, yesterday, agreed with your Board that there is no objection to providing the Bureau of Motor Vehicles with your certificate of the persons released from the Logansport State Hospital who have been "restored to mental health" or "sufficiently recovered to be released."

Yours very truly,
(Signed) Arthur G. Loftin
Acting Director

* * *

DIVISION OF SAFETY RESPONSIBILITY
& DRIVER IMPROVEMENT IN DEPT.
OF BUREAU OF MOTOR VEHICLES
Room 148, State House
Indianapolis, Indiana
February 15, 1950

Dr. John A. Larson, Supt.
Logansport State Hospital
Logansport, Indiana
Dear Sir:

In answer to your letter of February 8, 1950, please be advised that letters which submit information as to your opinion of the hazards of a discharged patient's driving abilities is made confidential.

In the denial of applications for current driving licenses because of lack of sufficient proof of mental competency, these applicants are not advised to contact the institution in which they were a patient except in cases where there has been no prior legal adjudication of unsound mind.

Clearance cannot be had by examination of a private physician, but a legal adjudication of restoration to sanity is necessary in the case of those applicants who have previously been adjudged of unsound mind because of lack of capacity to make the proper affidavits, etc.

Enclosed herewith is a form letter which this agency attaches to all denials of applications.

Your interest and co-operation is greatly appreciated by this agency.

Respectfully yours,
LaRue Leonard, Division Director
By: (Signed) Charles H. Mains
Hearing Agent

* * *

STATE OF INDIANA
INDIANAPOLIS 4

Method of establishing proof of mental competency for purpose of obtaining a license from the Bureau of Motor Vehicles:

1. Any person having been adjudged of unsound mind by a Court of competent jurisdiction, whether committed to a mental institution or not, must obtain and furnish to the Division of Safety Responsibility, a certified abstract of record of the judgment or decree in which the party was found restored or recovered to sound mind. Such abstract of Court record can be obtained at the office of the Clerk of the Court.

2. Any person who has not been adjudged of unsound mind by a Court, but has been admitted or committed to an institution, must obtain and furnish to the Division of Safety Responsibility, a statement from the institution that such person has been discharged as recovered and will not endanger public safety upon the highways.

3. Any person who has not been adjudged of unsound mind by a Court, but has been admitted or committed to an institution, and who cannot obtain a statement from the institution as required in Section 2 above, must obtain and furnish to the Division of Safety Responsibility the statement of three (3) medical doctors that such person has recovered his mental competency and will not endanger public safety upon the highways. These statements must be accompanied by an affidavit of the applicant showing the inability to obtain the statement from the institution and the valid reasons for such inability.

4. Any person who has not been adjudged of unsound mind by a Court, but has been admitted or committed to an institution, and who cannot obtain a statement from the institution as required in Section 2 above, may, upon written application, have a hearing in the County in which he resides; at which hearing, he, as moving party, may present on his behalf, the testimony of a substantial number of reputable citizens of his com-

munity who believes he has recovered mental competency and will not endanger public safety upon the highways."

The present procedure at the Logansport State Hospital is that in the routine staffing of all patients for final discharge, as soon as the staff agrees on a discharge, a letter is dictated by the clinical director giving the type of discharge, diagnosis, and opinion as to driving hazard. These patients, especially certain groups, should have the same supervision that other discharged organic cases receive—epileptics in some states. Before the license is restored, the patients should be referred to a physician, selected by them, who should give them any necessary supervision, including treatment for seizures, observation, et cetera. They should be cleared by the physician before the license is restored. In all cases, the hospital recommendations must be kept confidential by the State License Bureau. The following is a tabulation showing the diagnosis, psychiatric prognosis, and driving recommendation of 161 cases discharged from the Logansport State Hospital in 1949:

Diagnosis

Schizophrenia all Types	58
Manic all Types	32
Senile Psychosis	4
Psy. with Cerebral Arteriosclerosis	7
Involutional Psy.	11
Psy. with Convulsive Disorders	11
Psy. with Syphilis	7
Psy. with Alcohol, all Types	14
Paranoid Conditions	3
Mental Def.	3
Psychoneurosis, all Types	6
Post Encephalitis	1
Psychopathic Personality	3
Psy. Assoc. with OC of CNS Deaf Mutism	1
Psy. due to Drugs	1
Primary Behavior Disorders	1
Without Psychosis	1
TOTAL	161

Psychiatric Prognosis		*Driving Recommendations*	
Good	5	Good Risk	5
Fair	14	Fair Risk	12
Questionable	4	Questionable	6
*Poor	137	*Poor Risk	137
*Very Poor	1	*Very Poor Risk	1
TOTAL	161	TOTAL	161

*Should not drive.

In some states, a discharge from the state hospital as "sufficiently recovered to be released" automatically restores the legal rights and status of the patient. Here, in Indiana, most of the discharges are not marked restored to mental health, but "sufficiently recovered to be released." It is necessary for the court to restore the patient to sanity. The hospital superintendent can have no interest in these proceedings. Conferences are being held by officials with representatives of the state's Attorney General's Office so that the discharge from the hospital *per se* will be enough without the patient having to resort to judicial procedure.

In Detroit, all patients are referred to the Traffic Clinic for examination before their licenses can be restored.

There is no reason why the state licensing department cannot benefit by psychiatric examinations based upon daily observations extending over long periods of time. With the discharge from the hospital, a letter can be mailed to the Motor Vehicle Department giving the opinion of the staff as to the advisability of the patient driving. A hospital discharge does not mean that the patient is a safe driver. He may never have had adequate mental health; he may be epileptic, feebleminded, crippled in some way. He may have had an acute episode—the cause for which he is committed to a state hospital—recover from this so that he can safely adjust in the community. Again, a paretic, schizophrenic, or manic-depressive patient may have remissions and be paroled with the possibility of a relapse.

Granted that few are approved for driving, the fact remains that some, if not many, of these patients may have relapses. By keeping these potentially recurrent psychotic patients from the wheel, thousands of accidents resulting in the loss of money, lives, damage to property may be saved.

Ideally every patient discharged from a mental commitment should have a certification as to driving. This should be independent entirely of any legal procedures as far as restoration to sanity is concerned. Upon the basis of this, the license should be withheld. In selected cases, the patient may appeal to the licensing department and submit to psychiatric examination. This should be of such importance that a psychiatrist should be available—whether centrally located or in the form of a mental clinic.

The Detroit Traffic Clinic has demonstrated the value of these examinations. There are not over a half dozen clinics giving routine traffic examinations as in Detroit. Many communities cannot, at least yet, finance or man such clinics. Yet daily thousands of patients with adequate psychiatric observation and diagnosis are being released.

During a police psychiatry meeting, Mr. Canty,

executive director of the Psychopathic Clinic, of which the traffic clinic is an adjunct, Recorder's Court of Detroit, planned to investigate the number of patients who had been committed to state institutions in the history of the Clinic. He will analyze these records and report in a subsequent convention.

Modus Operandi or the predictability of success or failure of the offender, accident-prone drivers, et cetera, is based upon a stereotype of behavior often found, present in all, but of special importance among offenders.

Because of a certain, often differential, habitual activity noted among criminals (years before any psychiatrists ever called attention to this phenomenon) police officials described the detailed manner of committing a crime; classified and disseminated this and were able to predict time and to apprehend the offender, although then unknown, by his M.O. (method of operating). Much can be done in the study of offenders merely by the correlation of the M.O. factors at the time of the accident or crime with personality factors available after his apprehension. In this way it is possible to explain why one criminal acts in a given way. His M.O. is predicated upon all possible personality factors, including habitual responses, education, intelligence, hostilities, et cetera. After personally, as police officer for four years, seeing how revealing the analysis of the M.O. could be, the writer for years later in his forensic contacts as research psychologist, and later as forensic psychiatrist within penal institutions, court clinics, community clinics, and institutions (private and public), studied these problems. Later sociologists, working in court clinics and within prisons, selected accident-prone drivers and those criminals who would fail or succeed upon probation or parole. Because of this ability, sociologists serve as actuaries in the Illinois prison system, making their predictions upon prisoners coming up before the Parole Board. The methods of the sociologists were statistical, not individual in character, and usually based upon weighted factors. They would point out after a summary of their findings that the individual had 80 per cent chances for success or failure, et cetera. They would use the psychiatrist's diagnosis as one weighted factor alone and often attenuate the value of this as a prediction factor. The psychiatrist, however, after an analysis of all the given factors, objectively considered, unweighted, would make a definite individual prediction in many cases. Both methods of prediction revealed a high ratio of success.

In making his predictive analysis, the writer would integrate the evaluation of the M.O., crime incidents, behavior at the scene of the accident, or commitment allegations with the entire psychiatric history and all examination results. (See papers, "Prediction of Parole Success or Failure by the Prison Psychiatrist," read at the annual meeting of the American Prison Congress held in Baltimore, 1931; "The Prison Psychiatrist, A Statistical Analysis of Over 15,000 Prisoners," read at the annual meeting of the American Psychiatric Association at Philadelphia, 1932; "The Modus Operandi and Personality Studies of Homicide Offenders," read at the annual meeting of the American Psychiatric Association held in N.Y.C., 1934; "Modus Operandi and Personality Studies of Sexual Offenders," including pictures and an analysis of Goodrich, whose crime was responsible for the Sex Act of Michigan, read at the annual meeting of the International Association of Identification Experts held at Dallas, Texas, 1936; "The Modus Operandi as a Psychiatric Method of Securing Rapport," read at the annual meeting of the American Psychiatric Association, Pittsburgh, Pa., 1937; "Dactyloscopic and Psychobiological Integration," read at the annual meeting of the American Orthopsychiatric Association, N.Y.C., 1937; "The Modus Operandi and Personality Studies of Arson Offenders," a preliminary outline published in the *Michigan State Police Journal,* 1940).

Summary

1. A brief reference was made to the leaders or clinics pioneering in the examination of traffic offenders.

2. The average behavior or court clinic including criminal detection laboratories, police psychiatrists are not making routine examinations of traffic offenders.

3. Although many states prohibit driving of committed patients, nothing is done to protect the public from these patients driving, who after final discharge may still be dangerous as drivers. California has a special law relating to the epileptic driver.

4. The Indiana State Bureau of Motor Vehicles now is receiving opinions as to discharged state hospital patients. These opinions are confidential.

5. In all cases where it is known in any way

(Continued on Page 1311)

Impressions of Gout

By Fritz Bramigk, M.D., Ph.D.

Detroit, Michigan

THE STUDIES and impressions herein reported represent part of an intensive work on gout, none of which has yet been published. This work was stimulated by the observation that during my early years of medical practice in this country (beginning in 1925) I saw a surprisingly small number of patients with gout. Since my experiences in Europe had accustomed me to seeing numerous cases of gout during the year, I wondered whether there might not be some reason, environmental, climactic, economic, or social, why the incidence of gout in my practice had dropped so radically. Since it is generally accepted that there are phases of gout which are non-articular in manifestations, I wondered whether it might be that I was not recognizing the atypical forms of gout, or whether gout in the United States manifested itself ordinarily in different guise from the classical forms which have been described primarily on the basis of European investigations and publications.

Review of available literature on the problem of gout soon led to the recognition that constant repetition of concepts were handed down from textbook to textbook and accepted without adequate confirmation, and that frequently there was insufficient differentiation between gout primarily as a metabolic disorder, and gout primarily as an arthropathy. In addition, it was quite evident that much of the research on uric acid metabolism had been performed with too brief a period of observation. Many of the reports involved investigations which lasted only a few days. The effect of purine-containing foods was expected to be manifest within a day or two after the ingestion of these foods.

I felt that it would be wisest for me to approach the problem from an unprejudiced viewpoint and to make long range observations on uric acid metabolism. In view of unsatisfactory experiences with subjects who were hired for the purpose of study, and whose unreliability became apparent very early, I found it necessary to do most of the work upon myself. The first procedure was to establish my endogenous uric acid output. For this purpose, I lived on a purine-free diet for four and one-half months in 1931 and determined that the level of endogenous uric acid output for myself was 316 mg. per twenty-four hours. Determinations made of my serum uric acid concentrations varied initially from 6.4 to 5.0 mg. per cent. During the period of my diet, the level varied from 2.4 to 2.0 mg. per cent. Subsequent investigations on myself and others have convinced me that the average level of the endogenous uric acid excretion is closer to 450 mg. per cent or 500 mg. per cent. In a perfectly normal individual without any manifestations of the gouty diathesis (which I shall define later), I found that the level of the endogenous uric acid excretion was reached within a period of about three to five days after the initiation of a purine-free diet. Table I, which was obtained from such a normal control, is representative.

TABLE I. URIC ACID EXCRETION ON PURINE-FREE DIET IN A NORMAL CONTROL

Date	24-hour Urine Uric Acid Excretion
12/4/33	3,263 mg.
12/5/33	1,568 mg.
12/6/33	1,392 mg.
12/7/33	398 mg.
12/8/33	468 mg.
12/9/33	425 mg.
12/10/33	734 mg.
12/11/33	428 mg.
12/12/33	351 mg.

TABLE II. URIC ACID EXCRETION ON PURINE-FREE DIET IN A GOUTY INDIVIDUAL

Date	24-hour Urine Uric Acid Excretion
10/19/44	1,030 mg.
20	1,060 mg.
21	1,050 mg.
22	945 mg.
23	1,150 mg.
24	1,320 mg.
25	1,030 mg.
26	920 mg.
27	620 mg.
28	640 mg.
29	575 mg.
30	550 mg.
31	380 mg.
11/1/44	470 mg.
2	460 mg.
3	lost mg.
4	420 mg.
5	520 mg.
6	380 mg.

In contrast, Table II, which represents one of many series of studies upon myself, is a typical result in a patient with gouty diathesis upon a purine-free diet.

It was quite apparent that in my own case the delay in reaching the level of endogenous uric acid excretion was almost two weeks, as compared with the relatively rapid attainment of that level in the normal control. For a period of seven and one-half months in 1944-1945, I made daily

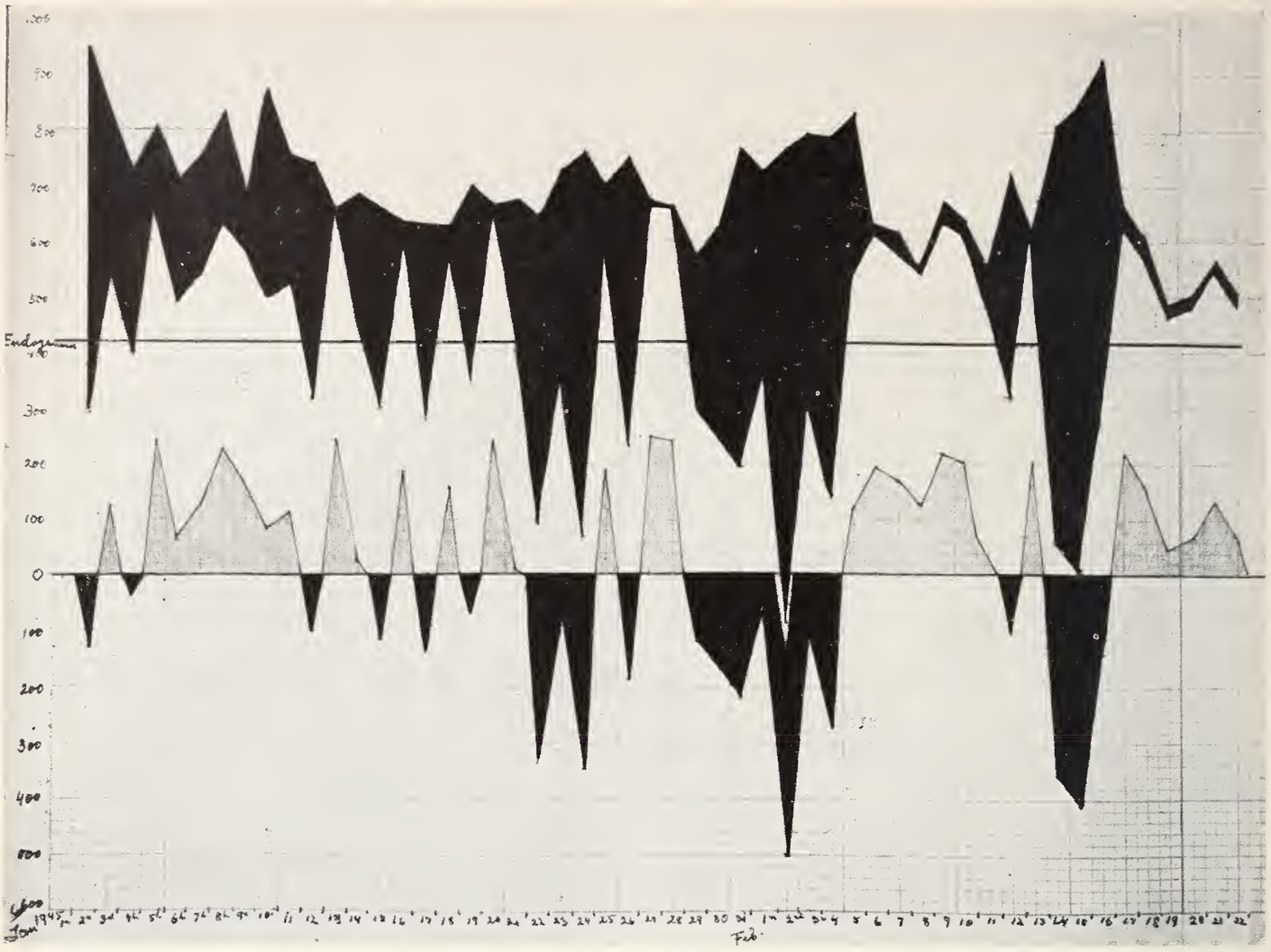

Fig. 1-*A*. The top of the shaded area indicates excretion of uric acid in each 24-hour urine specimen. The graph line starting at O when below O indicates the amount of uric acid to be considered as retained in the body. The graph line above O indicates the amount of uric acid excretion in excess of the total uric acid intake and endogenous uric acid.

measurements of my uric acid excretion, and calculated my uric acid intake in foods.[1] For a seven-week period on a purine-poor diet during this interval (with an average intake of 279 mg. of uric acid daily) my total intake of uric acid in the food in that seven-week period was 13.692 grams, while my urinary excretion of uric acid was 34.244 grams. The difference between these two figures, or 20.552 grams, represents the endogenous uric acid output during that interval, which came to approximately 420 mg. daily.

For comparison, on days during which my purine intake was higher, averaging 653 mg. of purines calculated as uric acid per day, my uric acid output in twenty-four hours during those days averaged 802 mg. The difference between these latter figures is approximately 149 mg., and the difference between this figure of 149 mg. and my average endogenous uric acid excretion of 420 mg. represents in essence a retention of 271 mg. of uric acid daily during this interval.

It must be noted that the intake of 653 mg. of uric acid per day during the later period which I have described represents a moderate and not a high intake of purine-containing foods. To illustrate further the significance of these findings, I have delineated in graphic form for a period of fifty-three days the following measurements:

1. The twenty-four-hour intake of uric acid (calculated from the purine-containing foods).
2. The twenty-four-hour total excretion of uric acid.
3. The amount of uric acid excreted beyond intake plus endogenous excretion (420 mg.) in twenty-four hours on those days when the uric acid excretion exceeded the total of uric acid intake plus endogenous uric acid excretion.
4. The amount of uric acid retained on those days when the total uric acid excretion was less than the sum of the uric acid intake plus the endogenous uric acid excretion.

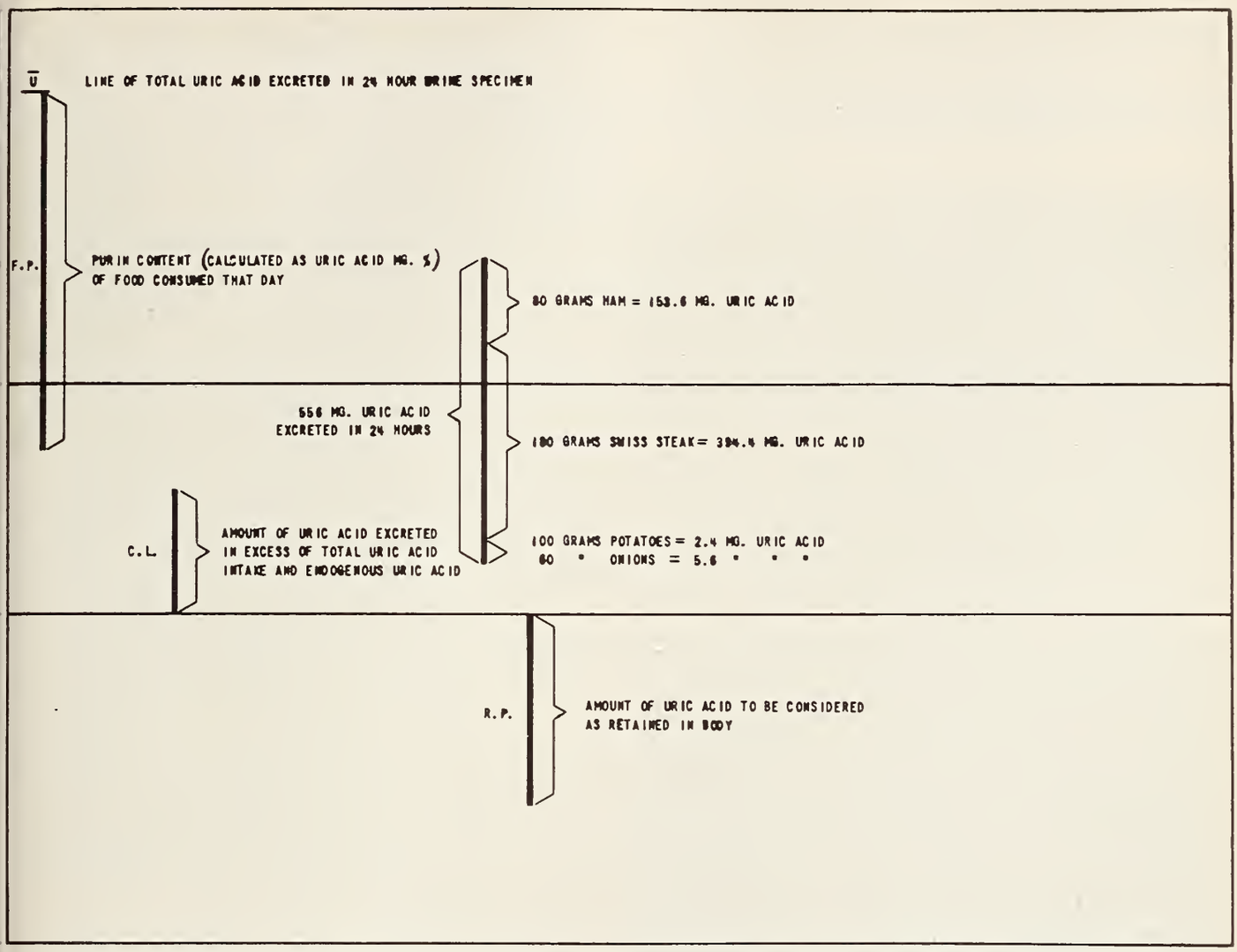

Fig. 1-*B*. For proper understanding, Figure 1-*B* should be superimposed upon Figure 1-*A*.

I should note parenthetically that during the periods of my dietary regulation and metabolic studies, attempts were made to control, as far as possible, such variables as activity, disposition, and other environmental factors. My weight during these intervals remained practically constant.

The volume of urine excreted in any twenty-four hour period bore no consistent relation to the amount of uric acid excreted in that period. Projecting the retention of 271 mg. of uric acid daily, as derived from the studies mentioned above, it is apparent that, other factors being constant, over a period of thirty years there would result an accumulation of about 6 pounds of uric acid in the tissues of the body. It is surprising to find occasionally at post mortem examinations of gouty patients, enormous deposits of urates in mesenchymal tissues.

It is my impression that this retention of 271 mg. of uric acid a day is not an excessive amount by any means. One sees so frequently at luncheon meetings men who fall asleep during the after-dinner speeches, even if the speaker is good, possibly partly as a result of excessive uric acid saturation. There is a structural chemical similarity between uric acid and barbital, and it was the observation by von Mehring that patients with high uric acid concentrations were so sleepy which stimulated Emil Fischer to synthesize barbital.

From observations and studies of this character made upon myself, upon normal controls, and upon patients with classical gout, I have arrived at certain impressions regarding the manifestations of this disturbance of purine metabolism. These impressions may not withstand critical scientific analysis at the present time. In the first place, they represent the result of studies upon a very small group of individuals. The limitations on the extent of study were necessitated by lack of facilities and lack of trustworthiness of hired subjects. I have attempted to compensate for the

few patients I have studied by investigating intensively the ones I was able to observe.

It is my impression that the picture which the word "gout" brings to the mind of the average

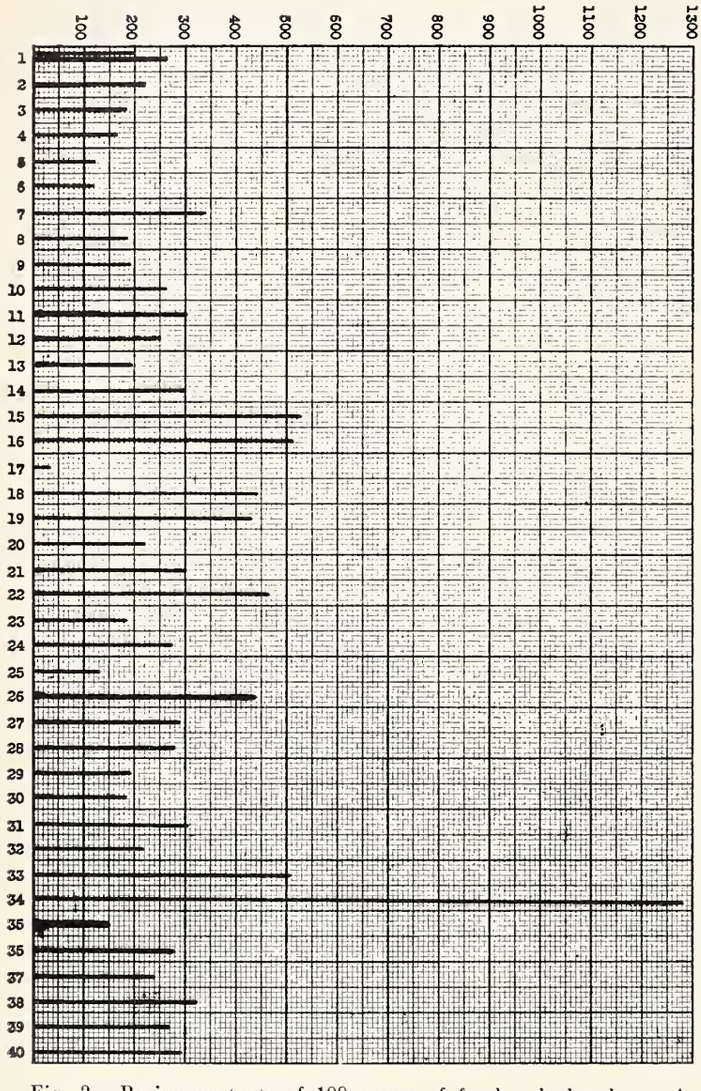

Fig. 2. Purine contents of 100 grams of food, calculated as uric acid mg. per cent. Taken from Table 58B, pp. 756-758 of Dietetics for the Clinician by Milton A. Bridges, according to McCane and Widdowson ("Chemical Composition of Foods," Medical Research Council, 1940).

1. Bacon, fried
2. Bass, steamed
3. Beefsteak, grilled
4. Beef, topside, lean
5. Brains, calves, boiled
6. Chicken, roasted
7. Cod roe, fried
8. Crab, boiled
9. Duck, roasted
10. Flounder, steamed
11. Goose, roasted
12. Haddock, fried
13. Ham, lean, boiled
14. Hare, roasted
15. Heart, sheep, roasted
16. Herring, fried
17. Irish stew
18. Kidney, ox, stewed
19. Liver, calves, fried
20. Lobster, boiled
21. Mackerel, fried
22. Mussels, boiled
23. Muttonchop, lean, fried
24. Mutton leg, boiled
25. Oysters
26. Partridge, roasted
27. Pigeon, roasted
28. Pheasant, roasted
29. Pork loin roast, lean
30. Rabbit, stewed
31. Salmon, canned
32. Shrimps, cooked
33. Smelt, fried
34. Sweetbreads, stewed
35. Tongue, ox, pickled
36. Trout, steamed
37. Turkey, roasted
38. Veal cutlet, fried
39. Veal fillet, roasted
40. Venison, roasted

For one bottle of beer the author estimates 80 mg. of uric acid.

physician is a relatively rare manifestation of this disorder. The acute, dramatic arthropathy, which is seen classically, and is so widely discussed in the literature of science, fiction and history, is by no means the exclusive nor the most common manifestation of this disorder, in my opinion. I have the impression, based on my experiences, that a good many of the vague myalgias, neuralgias, "lumbagos," "sciaticas," "muscular rheumatisms," "fibrositis," and a wide assortment of vague aches and pains in the muscles and joints of the body, plus ill-defined visceral manifestations, such as gastrointestinal disturbances and proctalgias, may actually be in many instances manifestations of gout in its broadest sense, meaning a disturbance of purine metabolism. It is well known and widely accepted that diverse renal lesions may accompany gout. The incidence of hypertension and arteriosclerosis in gouty patients has been demonstrated to be higher than that in a normal population. The mechanism of the disorder of purine metabolism is not clear. It has been suggested that retention of uric acid in the body may be due to interference with renal excretion of this substance. However, this renal function may be entirely normal in the gouty patient, at least as determined by the usual kidney function tests. Undoubtedly, in late stages of gout, complicated by advanced renal disease, uric acid retention enters the picture on a renal basis coexistent with azotemia but this mechanism does not apply in the vast majority of gouty patients.

From the studies similar to those described, I arrived at the conclusion that I represented an example of abnormal purine metabolism. I had occasional periods of mild arthropathy characteristic of so-called classical gout, associated with a few tophi, but I was also subject to the vague aches and pains described as neuralgias and myalgias and so forth. I noted that these episodes of discomfort coincided with periods of uric acid retention, and were relieved by strict attention to dietary restriction of purine plus occasional small doses of colchicum. During this period, I noted that the ingestion of wheat would lead to decreased uric acid excretion, and presumably uric acid retention. As an example, for a seven-day period in November, 1934, I ate a practically purine-free and wheat-free diet and excreted an average of 435 mg. of uric acid daily. During the subsequent four days, I ate a purine-free diet but included wheat, and my uric acid excretion dropped to an average of 319 mg. daily. On occasion, I found that the ingestion of wheat products, even when I was on a low purine intake, might lead to the development of myalgia, et

cetera. Skin tests for wheat sensitivity made by highly competent allergists were negative.

As a result of these experiences, I felt that the ingestion of wheat causes uric acid retention in my own particular case, presumably as a result of wheat sensitivity. When I restricted my food to a wheat-free and low purine diet, my symptoms entirely subsided and disappeared.

In studying my gouty patients I found many instances of wheat sensitivity as gauged by skin tests. In these patients, on repeated occasions, I have observed that a low-purine and wheat-free diet results in prompt relief of their gouty complaints. However, should these patients return to a wheat-containing diet in a few days, even if the purine content is kept low, recurrence of their difficulties was the rule; but in those instances where the wheat-free diet was maintained for three or more months, it was common to find that the patients had lost their wheat sensitivity at the conclusion of that period.

The recent work of Selye[2] on the general adaptation syndrome and the diseases of adaptation is too well known to warrant repetition here. As a result of my studies in gout plus my reading of Dr. Selye's monumental work, it is my impression that gout represents one of the diseases of adaptation. We are all aware of the obvious factors which play contributory roles in the etiology of gout, such as trauma, emotional disturbances, infection, weather changes and dietary indiscretions. My own studies lead me to believe that allergy, at least in many instances, also plays a contributory role, and furthermore, that the hereditary tendency in gout may well be due to the inheritance of allergy rather than the inheritance of a disturbed purine metabolism. In a patient with a constitutional disorder of purine metabolism resulting in accumulation of uric acid, possibly associated with a hereditary factor of allergy, the response to stress with resulting alarm reaction including lymphatic breakdown leading to further endogenous elaboration of purines, may lead to the accumulation of uric acid and other metabolites in tissue spaces with resultant precipitation of the symptoms of gout. The metabolites in the tissue spaces probably are retained therein as a result of vasospasm, and some of these metabolites probably correspond to the "P" factor of Lewis. The cause of the vasospasm is uncertain but may be related to concomitant disturbance of the autonomic nervous system or the hypophyseal-adrenal relationship.

Based on this concept, my management of a so-called gouty patient consists of the following approaches:

1. Prevention of uric-acid retention, including limitation of purine intake.
2. Search for, and elimination of, allergy as a contributory factor.
3. Persistent use of small doses of colchicum daily.
4. Avoidance, insofar as possible, of the contributory factors mentioned formerly.
5. Maintenance of the general physical and mental health of the patient.

Summary

1. Gout is a common disease, frequently missed because its manifestations are often atypical.

2. Disturbance of purine metabolism, with retention of uric acid, appears to be the primary mechanism involved. Studies are herein reported confirming the advisability of purine restriction in the management of gout. However, allergy may play a causative role in the retention of uric acid even with adequate dietary purine restriction.

3. The concept of gout as a disease of adaptation is briefly discussed.

References

1. Bridges, M. A.: Dietetics for Clinicians. Philadelphia: Lea and Febiger, 1941.
(Table on the Chemical Composition of Food from the Medical Research Council, 1940).
2. Selye, H.: The general adaptation syndrome and the diseases of adaptation. J. Allergy, 17:231-247, 289-323, 358-398, 1948.

MSMS

FSA has a budget, this year, of $1,591,000,000—larger than any department except National Defense—and 35,363 full-time and 4,127 part-time employes. It has 12 regional offices and many National Institutes of Health and Health Workshops in cities and towns. It administers Social Security which includes Public Assistance, Old-age and Survivors Insurance, the Children's Bureau, and Federal Credit Unions; Employes' Compensation; Public Health Service including quarantine and 20 odd hospitals; a printing house for the blind in Louisville; Food and Drug Administration; Vocational Rehabilitation, and the Office of Education. In Washington, it operates two big public hospitals—St. Elizabeths and Freedmen's—Howard University for Negroes, Gallaudet College and Kendall School for the Deaf.

Does Uterine Myoma Always Mean Operation?

By William F. Mengert, M.D.

Dallas, Texas

Incidence

UTERINE myomas have been known since antiquity but it was not until 1813 that they were identified as arising directly from muscle. There have been no recorded cases of myoma of the uterus prior to puberty. It is barely possible that some occur and remain unrecognized, because smooth muscle tumors of other organs; for example, stomach, and intestine are well known. Few myomas develop prior to the age of nineteen or twenty. Following the age of twenty-five they begin to grow and approximately 20 per cent of all women between thirty and thirty-five years old have myoma even though small. Obviously, the greatest incidence is reached just before the menopause because myoma of the uterus regresses thereafter and new ones don't develop. On most gynecologic services, myoma of the uterus will range around 4 to 5 per cent of gynecologic admissions. In any hospital pathologic service myoma will be found at autopsy in approximately one-third of adult negro women and one-tenth of white women.

Growth and Development

The blood supply of myoma is the all-important factor controlling growth and development, and explains many things about the tumor. Each nodule usually possesses one nutrient artery penetrating the pseudocapsule and going directly into the tumor. Otherwise there is transference of blood to the tumor from the capsule by capillary vessels. In consequence, the blood supply of myomas is generally poor. Another characteristic feature of uterine myoma is spherical growth. Because of local distortion this may not be true in some instances, but the tumor does tend to grow equally in all directions. As it grows, it pushes aside normal muscle tissue and never engulfs vital structures. The cells of the immediately surrounding normal muscle tissue are, therefore, compressed, become necrotic and fibrotic, and suggest a tumor capsule. Actually, myoma does not have a capsule, but a pseudocapsule, composed of these compressed and fibrosed cells. A myoma can be readily shelled out from its pseudocapsule, with minimal bleeding if one finds the correct line of cleavage. Otherwise, myomectomy is rough and bloody going. Myomas are somewhat dense to palpation. Generally, the consistency is harder than normal muscle. On the other hand, if degenerated, they may be so soft as to suggest pregnancy, or ovarian cyst. The uterus itself does not enlarge or develop along with the growth of the tumor. Only the tumor enlarges and thus, seemingly causes an enlarged uterus. This is, however, apparent only. Conversely, the uterus does not have to involute following myomectomy and therefore has good opportunity to heal.

Myomas arise from muscle tissue itself and apparently not from embryonic inclusions. They have no relation to parity and there is no apparent relation to general body nutrition. The idea of a growth energy theory originated with the thought that isolated cell bundles for some unknown reason, shake off the state of rest and proceed to grow. No report has been made of occurrence of myoma in women under the age of puberty, and we are all thoroughly familiar with the fact that when a woman with myomatous tumors reaches the menopause she will have no further trouble with the tumor unless malignancy develops. These facts gave rise to the idea that myomas are associated with, and subject to, the influence of estrogen. On the other hand, this is not true of myomatous tumors of other smooth muscle organs. Therefore, there is reason to believe that atrophy of the myoma at the menopause is not due to withdrawal of estrogen, but to the markedly diminished blood supply of the genital region of the postmenopausal woman. This is a secondary, and not a primary effect of the estrogenic hormone.

Types of Myoma

Myoma of the uterus may be classified as (1) cervical or corporeal, with about 8 per cent being cervical and 92 per cent corporeal; (2) in relation to the layers of the uterus. Since most of the bulk of the uterus is muscle you would obviously expect most myomas to be interstitial or intramural. This is true. Sixty to 70 per cent are intramural, 10 to 15 per cent are submucous, growing underneath the endometrium, and the remaining 20 to 30 per cent are subserous, developing underneath the peritoneum, with or without a pedicle (Fig. 1).

The submucous myoma obviously will cause

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most trouble because it can interfere with fertility; it can distort the cavity of the uterus and interrupt pregnancy when it starts; it is associated with bleeding. When a woman with uterine myoma has

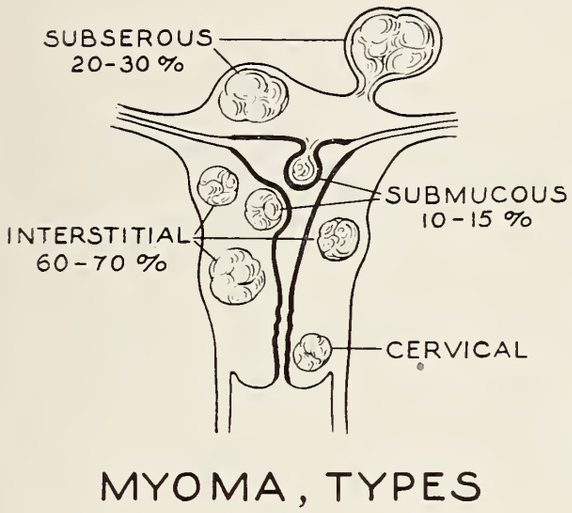


Fig. 1.

menorrhagia, the chances are strong that she has a submucous nodule, or if not a submucous nodule, certainly one close to, or encroaching upon, the endometrium.

The subserous variety do not cause bleeding but, because they are often pedunculated, frequently give trouble by virtue of degeneration, twisted pedicle or dystocia in labor. Furthermore, it is the subserous type of tumor which produces the wandering fibroid, a pedunculated subserous tumor whose blood supply has become impaired. Because of this the surface becomes sticky and adheres to omentum, mesentery, gut or parietes. Ultimately, the tumor blood supply is derived from the secondary attachment and the primary pedicle withers and breaks.

Since myoma originates within the wall of the uterus, intramural fibroids, of course, are the parent of all types. Although intramural tumors can degenerate, there can be an astonishing number and variety without symptoms.

Symptoms

The symptomatology of myomas includes bleeding, discharge, pressure, pain and mass.

Dysfunctional bleeding is frequently associated with myoma. In fact, vaginal bleeding depends almost entirely upon associated phenomena and generally does not originate within the mass of the tumor. A patient seen a number of years ago illustrates this point. She appeared with the cervix about 4 or 5 centimeters dilated by a myomatous nodule approximately tennis ball in size. It originated from the corpus and had a long pedicle which was readily snipped off with the scissors.

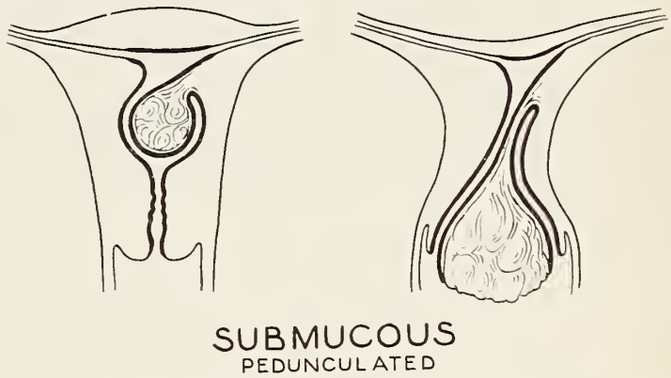


Fig. 2. Note enormous enlargement of the surface area of the endometrium as the tumor grows. Not only will the endometrium bleed, but also the tumor can bleed directly from the raw area projecting into the vagina.

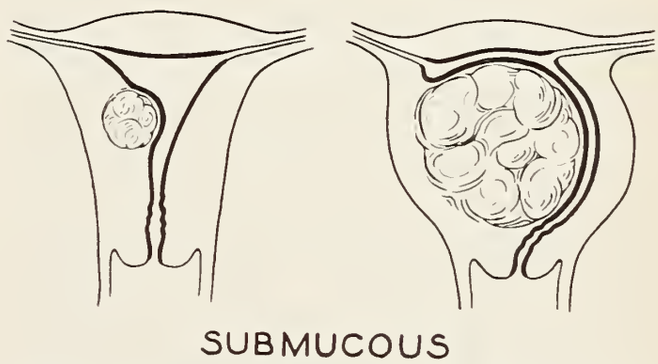


Fig. 3. Note enormous enlargement of the surface area of the endometrium as the tumor grows.

Six months after going home she returned, still bleeding. At this time total hysterectomy was performed, removing an anatomically normal uterus. With careful, visual inspection of the removed uterus it was impossible to see where the pedicle originated. This woman was bleeding, not from the myoma, but from a menstrual dysfunction (Fig. 2). Bleeding, as pointed out, depends almost entirely upon associated phenomena. On the other hand, if there is a big myomatous nodule just under the mucosa and the endometrium is stretched over it, the distortion of the endometrial cavity and the *great increase in the surface area of endometrium from which the woman can bleed* would certainly explain to some extent a greater flow than before (Fig. 3). The uterine cavity is normally a few square centimeters in extent. If there has been distortion of the cavity so that the surface area of the endometrium is many times increased, one would expect the patient to bleed more profusely with each mentrual period simply because she has

a potentially larger bleeding surface. Myomas do not bleed after the menopause. If a woman with a known myomatous uterus bleeds after the menopause, we must look beyond the myoma for the bleeding. Too many women have perished unnecessarily from cancer of the uterus because of lack of this knowledge. To repeat, women do not bleed from fibroids after the menopause.

Discharge from myomatous tumors is of secondary nature and usually arises from pedunculated submucous tumors which have become secondarily infected.

We must be very cautious about the symptom of pressure. I doubt that myoma ever causes pressure pain. Myoma can, however, cause pain, usually due: to interferenee with the blood supply, as so often happens during pregnancy; to torsion of a pedicle; or to infection of the nodule, secondary to diminished blood supply. Regarding the symptom of pain, remember that myomatous tumors possess no nerves except those accompanying blood vessels. Therefore, all of the symptomatology relating to pain from myoma must originate in the surrounding organs or in the blood vessels. For instanee, when a myomatous nodule becomes infected and is exquisitely tender, the pain obviously comes from the overlying peritoneum and not from the tumor itself. Sometimes pain takes the form of uterine cramps, originating when the uterus attempts to expel a submucous pedunculated myomatous nodule as a foreign body. This can also be a rare cause of inversion of the uterus, although usually the myomatous pedicle will stretch sufficiently to allow the tumor to be extruded through the cervix.

The symptom of finding a mass is of interest. In this connection, one of the most interesting stories I know was concerned with a more than normally intelligent woman who awakened in the middle of the night with a full bladder, let her hand rest on the abdomen and felt a mass she had never felt before. She arose, voided, went back to bed, palpated her abdomen again and did not find the mass. She made the eorrect diagnosis; that there was some sort of tumor pushed upward and palpable only when the bladder was full. Actually, she had a myomatous tumor of moderate size, causing no symptoms except by its presenee. A small myoma placed at a strategic anatomic position can cause much trouble. For example, one smaller than a golf ball but precisely at the bladder neck can cause inability to void and neeessitate eatheterization. I have seen a small myoma, embedded in the wall of the rectum, produce constipation. Peduneulated myoma sometimes eauses obstruction to the course of labor. Here again it is not so much a matter of size as of the strategic position of the tumor.

Degeneration

Degeneration of myomas oecurs as a result of diminished blood supply or vascular accident within the tumor. Degeneration can be cystic, hyaline, calcification, necrosis, myxomatous, infection, sarcoma and hemorrhage into the tumor. Cystic degeneration is sometimes highly confusing from the diagnostic standpoint. This is especially true when the abdomen is opened and the operator gets that sudden sinking feeling that perhaps he is about to operate on a normal pregnancy.

Treatment

Which myomas should be treated? Initially, we must accept a basic rule: *The mere presence of myoma is not indication for treatment.* The foregoing statement is true until the tumor becomes larger than the size of a three months' pregnancy, provided the patient's age is considered. In other words, I would not hesitate to institute treatment in a woman twenty years of age with a myoma of this size, and I would seriously hesitate to do so in a woman forty-five years of age with the same size myoma, providing both of them were symptom free. This is based upon the belief that the young woman has evidenced ability to grow myomas, and her chances of reaching the age of the menopause without ensuing trouble are far less than those of the older woman. Not only do tumors grow faster in younger women, but also the younger women have a longer time to grow them. Another reason for removal of large tumors, unless there is a constitutional contraindication to surgical treatment, is their likelihood to develop sarcomatous change. The associated malignancy is generally sarcoma because myoma develops from the embryonic middle layer and is not epithelial. On the other hand, there is statistically some evidence of association of endometrial carcinoma and myoma. Perhaps this association may be due to two things: (1) If estrogenie influence produced myoma, it could also produce adenocarcinoma of the endometrium. (2) A simpler assumption is that submucous myomas may so irritate the endometrium as to influence it to develop carcinoma.

Operation.—When it comes to operative treatment, what is the choice of operation? There are four operations for myoma. Myomectomy, subtotal hysterectomy, total hysterectomy and vaginal hysterectomy. Incidentally, virtually any myoma which can be removed abdominally can also be removed vaginally. I do not recommend it but it is a nice stunt to do once in a while, although the nodules must be taken out by morcellation. After both uterine arteries are ligated, one simply removes the tumors individually or piece meal until the total size is sufficiently reduced to permit hysterectomy.

Myomectomy is not as satisfactory an operation as hysterectomy. Obviously, if the uterus is removed there will be no recurrence, whereas if myomectomy is performed, small unrecognized cell nests will grow or tumors already started may be overlooked. The uterus has one and only one function in this world, and that is reproduction. To me the only reason for conservation when it has shown a propensity to grow myomatous tumors is preservation of the reproductive function. After the reproductive function has been satisfied, so far as that woman, her husband and her family are concerned, myomectomy does not seem to me to be a sensible operation.

There is no more reason to debate subtotal versus total hysterectomy with regard to uterine myoma than with regard to any other type of indication for hysterectomy. I believe in routine total hysterectomy.

Technical difficulties of operation come from size and position. But never forget that it is very simple to reduce the size of the myomatous uterus by myomectomy as a prelude to hysterectomy. A tennis-ball-sized myoma behind the cervix can interfere seriously with elevation of the uterus into the abdominal wound. Cut across the posterior peritoneum of the uterus transversely, pull out the tumor and the uterus will come up. Towel clips will pinch the uterine edges together or sutures or hemostats can be used to control bleeding. Broad ligament myoma requires special technique in order to avoid damage to the ureter. These tumors should be carefully shelled out, after opening the top of the broad ligament.

Irradiation.—What is the effect of irradiation treatment? It has a minimal, if any, effect upon the tumor but, of course, produces castration. The woman then goes through the atrophy of the menopause with resulting decrease in pelvic blood supply and, therefore, shrinking of the tumors. I was taught some rules about irradiation; some of them are true, some are not. The first: women with bleeding submucous myomas should not have radium implantation, because of the strong possibility of infection attending the necessary packing of the uterus. On the other hand, this potential danger can be avoided if external irradiation with x-ray, instead of intracavitary implantation of radium, is employed. If external irradiation is employed, it is a vital necessity *to ascertain before treatment* that the woman does not have adenocarcinoma of the endometrium. In other words, *dilation and curettage must precede external irradiation.* The second rule: A myomatous uterus larger than the size of a three months' pregnancy should not be irradiated. In general, this rule is true. Myomas are not directly treated by irradiation, as mentioned above. The change occurring after irradiation is a decrease by about one-third in size and results from the atrophy attendent upon the induced menopause, rather than from direct action on the tumor. Therefore, the tumor will not disappear. This is not noticeable with small tumors, but may be disfiguring with large ones. Moreover, sarcomatous degeneration is found more often in large, than in small, tumors. The rule concerning size is only partially true, since large myomas can be treated by external x-irradiation if failure to disappear entirely is unimportant and the woman will chance the possibility of sarcoma. On the other hand intercavitary radium implantation is contraindicated because of the technical difficulties of failure to deliver a castration dose to the ovaries. There is always the possibility that a large nodule may push an ovary so far away from the uterine cavity as to be beyond the sphere of influence of the radium focus.

Operation versus Irradiation.—Now, who should get irradiation treatment and who, operation? I think we must apply the same type of philosophy and thinking here that is applicable to functional uterine bleeding. A woman of thirty with severe functional uterine bleeding, whether or not she has a fibroid, should receive hysterectomy because it is a selective operation and does not castrate her. A woman of thirty-five should also receive operative treatment. Moreover, most women of forty, with five, six or seven years of ovarian function ahead of them should not be unnecessarily cas-

trated. On the other hand, as patients approach the age of the natural menopause, irradiation castration becomes less and less of an emotional shock and therefore more and more preferrable to the

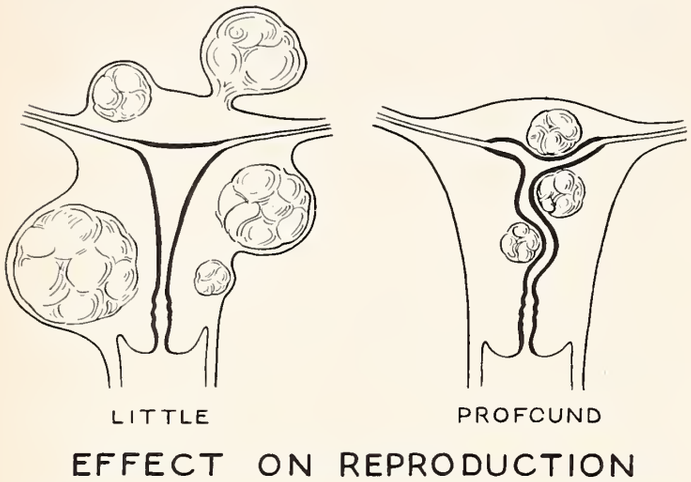


Fig. 4. Myomas disturb pregnancy when they distort and encroach upon the endometrium and the uterine cavity (*right*). The uterus may contain many tumors and successfully encompass a pregnancy if the tumors are external and do not affect the cavity (*left*).

physical shock of operation. In general, then, I would reserve irradiation for women at, or close to, the menopause when it is necessary that something be done for the myoma. Operation is reserved for the younger woman.

Relation of Social Factors to Treatment.—While we are discussing the question of age, let us also consider the effect of other social factors in motivating treatment. What would you do with a woman with a symptomless myoma the size of a small grapefruit? Let us consider four variants of this question. (1) What would you do if she were single, aged twenty-four? (2) What would you do if she were just married, aged twenty-four? (3) What would you do if she were thirty-four with three children. (4) What would you do if she were forty-four, irrespective of number of children? That is a most interesting question because nothing is different except age and maternal status. Before answering these questions, it is necessary that the examiner know specifically if a patient about to be myomectomized is in a position, and has the desire, to become pregnant. In other words, with a symptomless fibroid in a young girl who has no immediate prospect of reproduction, I should do nothing until she is prepared to undertake pregnancy. With a symptomless fibroid in a young, married nullipara I would perform myomectomy now. This woman has opportunity to become pregnant, she is young, has demonstrated her capacity to grow fibroid tumors, will grow more, or increase the size of the ones she has, and her chances of reaching the menopause without serious trouble are virtually zero. Such a woman should be told, after myomectomy, to become pregnant immediately. In the woman of thirty-four with three children, the obvious operation is hysterectomy. With the woman of forty-four, irrespective of family, if any treatment is necessary it should be irradiation because there is no sense in submitting her to the insult of a laparotomy when she has only a few years of menstrual life ahead. These are my personal views. Others may differ.

Myoma and Reproduction

Infertility.—Everyone believes that myoma and infertility are associated, although exact mechanisms are unknown. Perhaps women with myomas are prone to menstrual dysfunction, but whatever the cause, it is pretty well agreed that myomas are associated with infertility. Given a young woman, or rather a couple, on whom you have exhausted all of the tests for infertility, and the woman has a myoma, are you justified in recommending myomectomy? Although answers will vary, I believe the preponderance will be "yes." In other words, in the absence of other known causes of infertility it is justifiable to perform myomectomy on such a patient. After the patient becomes pregnant, and patients with myoma do become pregnant, there is always the question of abortion.

Abortion.—In general, when myomas do not distort the shape of the uterine cavity there is very little likelihood that they will produce abortion (Fig. 4). In other words, if there is bleeding associated with myoma in the nonpregnant woman the nodule is either submucous myoma or closely related to the endometrium. That is to say, the myoma is beginning to distort the endometrial cavity. In such an event, the likelihood of abortion increases with increased distortion of the cavity of the uterus. Moreover, with myoma directly under the endometrium the placenta has difficulty obtaining the blood supply essential for nourishment of pregnancy.

Differential Diagnosis.—There should be no great problem between diagnosis of myoma and of early pregnancy. Whenever a patient in the childbearing years presents herself with a midline

symmetric tumor the probability of pregnancy should always be borne in mind. Remember that while myomas can be hard in consistency, they can also be soft and cystic and thus counterfeit the pregnant uterus. In consequence, whenever there is a midline symmetric tumor of soft consistency it is virtually mandatory to do a biologic test for pregnancy before contemplating operation. As an alternate, and especially if there is no urgency, one may wait a month or six weeks because pregnancies increase rapidly in size during that time and myomas do not.

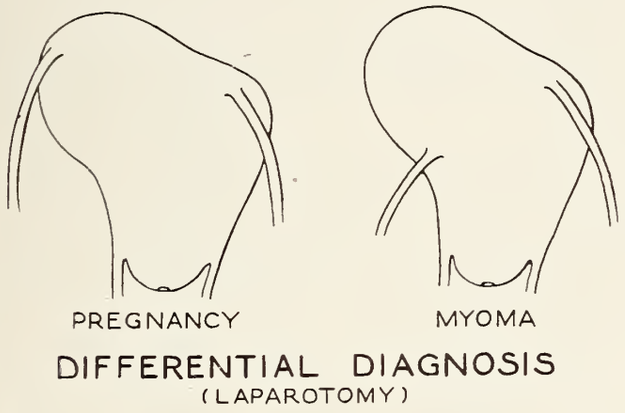


Fig. 5. Two identical situations seen at laparotomy. The round ligaments originate at the anatomic fundus of the uterus. Therefore, (*left*) there is a good chance the distortion is due to placental implantation whereas (*right*) the distortion is due to a myomatous nodule arising above the origin of the round ligaments.

At the time of operation, one is sometimes confronted with the all important question—myoma or pregnancy? Since the operator, standing at the table with the patient's abdomen already open, faces hard reality, it is highly desirable to make the most intelligent decision possible. In early pregnancy the uterus is frequently distorted because implantation has been on one or another side of the upper part of the cavity. This distortion can be mistaken for myoma. The clue to the situation lies in the round ligaments since these originate at the anatomic fundus of the uterus. Figures 5 and 6 clearly show how the relationship of the origin of the round ligaments differentiates between pregnancy and myoma in uteri which are otherwise identical in shape. Sometimes the myomatous uterus is symmetric, the round ligaments originate at the top, and decision is impossible. Then, the second step is to put a needle into the center of the mass. If the patient is pregnant, amniotic fluid will be obtained. If the myoma is solid, no fluid will be obtained. If however, the myoma has undergone cystic degeneration fluid may be obtained. In the last analysis you may have to sacrifice a possible pregnancy by opening the uterus in the midline and making a diagnosis by direct inspection. This method of making a differential diagnosis is not advocated. On the other hand, when because of a mistake the abdomen has been opened, it may be desirable to make a positive diagnosis at the risk of sacrificing the pregnancy. There are other possible hazards of myoma with regard to the process of reproduction and they include blocking of the pelvis by a pedunculated tumor, diminished uterine force, and delayed separation of the placenta. Although all of these can occur, most generally they do not.

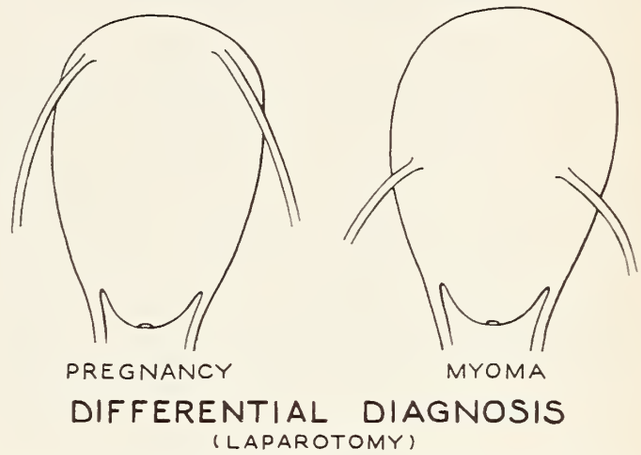


Fig. 6. Two identical situations seen at laparotomy. The round ligaments originate at the anatomic fundus of the uterus. Therefore, (*left*) there is a good chance the distortion is due to placental implantation whereas (*right*) the distortion is due to a myomatous nodule arising above the origin of the round ligaments.

Finally, it is desirable to say just a word about previous myomectomy. In general, a pregnant and previously myomectomized uterus is much stronger than a previously cesareanized uterus for the very obvious reason that healing after myomectomy takes place without the necessity for concomitant involution.

To sum up the matter of myoma and reproduction, it should be stressed that *by and large, the majority of women with myomas will become pregnant, will carry through to term without event, will give birth to healthy children, and will have no serious sequels.*

MSMS

It is estimated that about 25 per cent of solitary rectal adenomas become malignant.

* * *

The most common symptom in tumors of the larynx is hoarseness, which may be trivial or serious.

* * *

When a noticeable change in voice or a persistent hoarseness persists for a period of three weeks, cancer of the larynx must be suspected.

A New Antispasmodic—Bentyl Hydrochloride

Preliminary Experience

By A. Ray Hufford, M.D.

Grand Rapids, Michigan

A WIDE VARIETY of organic diseases and functional nervous conditions produce unpleasant symptoms largely or partly because of manifestations of smooth muscle spasm. Pain, cramps, diarrhea, constipation, nausea and vomiting are frequently manifestations of an abnormal increased tone or motility of the smooth muscle in the gastrointestinal, biliary, or genito-urinary tracts. Relief of such symptoms with the aid of antispasmodic drugs is frequently most useful in that it makes the patient comfortable during clinical investigation, while more fundamental therapeutic measures are being instituted to relieve an organic or psychiatric cause of the disturbance, and usually assures greater co-operation of the patient. In some functional disturbances relaxation of the hyperactive musculature may be sufficient treatment, or the rest obtained by means of drug therapy may actually contribute to healing of ulcerative lesions in a manner similar to the contribution of therapeutic pneumothorax in pulmonary tuberculosis or the mechanical splint in fracture cases.

One of the most widely used antispasmodics is atropine, either in its pure form as one of the salts of the alkaloid, as belladonna, or as one of the related natural alkaloids. Atropine itself is tropinyl tropate and may be represented by the structure in Figure 1.

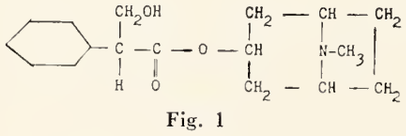
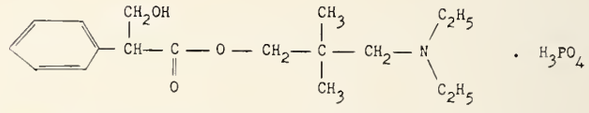


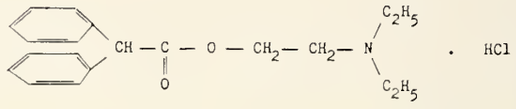
Fig. 1

Atropine has been one of the most dependable antispasmodics available, although it does suffer from certain well-known disadvantages which sometimes limit its usefulness. Therapeutic doses frequently dry the mouth, dilate the pupil, and paralyze the ciliary body to interfere with normal visual accommodation. Although these side actions are sometimes called "toxic," they really represent fundamental peripheral effects of atropine and are to be expected whenever sufficint amounts of the drug are given. True toxic effects of atropine are said to be due to the central actions of the drug, and might be expected in senstive patients with only moderate increases over the usual therapeutic dose. The margin of safety, therefore, with atropine is relatively small and represents the major limiting factor in use of this important compound.

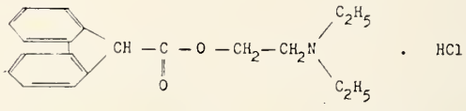
A number of synthetic compounds have been prepared which produce parasympatholytic actions similar to those of atropine and sometimes also direct inhibition of smooth muscle tone in a manner similar to the action of papaverine. From the chemical structures of typical examples of well-known synthetic "atropine-like" drugs indicated below, it will be seen that they resemble atropine in that they are esters of somewhat complicated but frequently different organic acids containing one or more rings. In the synthetic compounds shown in Figure 2, substituted amino ethyl groups replace the tropinyl radical of atropine.



phosphate of the
d,l-tropic acid ester of 3-diethylamino-2, 2-dimethyl-1-1-propanol
("Syntropan")



diphenylacetyldiethylaminoethanol hydrochloride ("Trasentine")

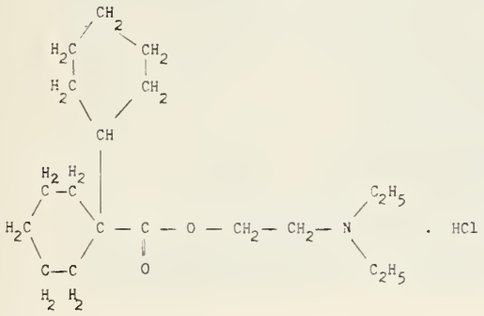


beta-diethylaminoethylfluorene-9-carboxylate hydrochloride ("Pavatrine")

Fig. 2

The older synthetic antispasmodics that are now more commonly used to replace atropine generally have the advantage over atropine of a wider margin of safety associated with some degree of specificity, so that when the therapeutic dose is given for treatment of spastic conditions, side effects on the mouth or eyes are uncommon. Compared with atropine, the limiting factor seems to be the variable therapeutic effect. While the synthetic compounds are usually safer than atropine, the response is not always as dependable, and for that reason they have only partly replaced the natural parasympatholytic alkaloids.

It was hoped that the test drug, diethylaminocarbethoxycyclohexyl hydrochloride* might possibly offer advantages in safety comparable to that of the older antispasmodics combined with efficacy similar to that of atropine. In structure it differs from the other esters of a substituted amino ethanol described above in that the rings in the acid are saturated. It may be represented by the structure shown in Figure 3.



diethylaminocarbethoxycyclohexyl hydrochloride ("Bentyl")

Fig. 3

Laboratory studies[1] indicate that Bentyl is approximately one-eighth as potent as atropine when assayed against that compound on the basis of the acetylcholine induced spasm in the isolated rabbit intestine. However, the mydriatic action of Bentyl was found to be only about 1/400 that of atropine and the inhibitory effect upon pilocarpine induced salivation was only about 1/300 that of atropine. Accordingly, a single dose of 10 mg. of Bentyl should be equivalent to several times an average human dose of atropine or belladonna containing 0.3 mg. of the alkaloid from the standpoint of antispasmodic potency, but would be only about 1/10 as potent in drying the mouth and even less potent in causing effects on the eye. Accordingly, preliminary observations were made in a series of patients who required antispasmodic therapy.

A series of forty-one patients were treated with Bentyl, given alone and in combination with barbiturates (phenobarbital, pentobarbital) and in combination with an antacid (magnesium trisilicate, hydrated aluminum hydroxide, and methylated cellulose). These patients were largely selected because of their failure to respond well to previous antispasmodic therapy with belladonna, atropine, Trasentine, Syntropan, or Pavatrine, with and without sedation such as barbiturates and bromides. They were adults ranging from twenty-one to fifty-nine years, and twenty-two were women, nineteen men. Bentyl was given orally in daily doses of 30 mg. usually divided into three single doses of 10 mg. each, before or after meals. A fourth dose of 10 mg. was occasionally given at the hour of sleep. Those patients who required concurrent sedation were given 10 mg. Bentyl tablets to which 15 mg. of phenobarbital or 15 mg. of pentobarbital had been added. Patients suffering from duodenal or gastric ulcer received medication six times daily, each tablet containing only 5 mg. of Bentyl in combination with magnesium trisilicate and hydrated aluminum hydroxide to antagonize gastric acidity and methylated cellulose which was included in the hope that it would serve as a protective covering for the ulcerated area and also possibly delay passage of the antacid from the stomach.

As will be seen from Tables I and II, the patients suffered from the irritable, spastic colon syn-

TABLE I

Condition Associated with Smooth Muscle Spasm	Frequency	Symptomatic Response: Virtually Complete Relief	Partial But Substantial Relief	Failure
Irritable, spastic colon syndrome	17	11*	4	2
Duodenal ulcer	8	7	1	0
Primary dysmenorrhea	10	8	2	0
Cholecystitis and biliary dyskinesia	5	5	0	0
Pylorospasm	4	2	1	1
Psychoneurosis	4	1	1	2
Food sensitivity	1	1	0	0
Diverticulosis	2	1	1	0
Gastric ulcer**	1	1	0	0
Mucous colitis	1	1	0	0
Totals	53	38	10	5

*Three cases responded only partially to Bentyl-phenobarbital, but complete relief was obtained when Bentyl-pentobarbital was substituted; one case required concurrent administration of Decapryn to obtain complete relief.

**Bentyl administered in combination with magnesium trisilicate, hydrated aluminum hydroxide, and methylated cellulose.

TABLE II

Symptoms	Frequency of Occurrence	Response: Virtually Complete Relief	Partial but Substantial Relief	Failure
Abdominal or epigastric pain or cramps	30	24*	4	2
"Gas"	12	9	3	0
Abdominal soreness and tenderness	10	9	1	0
Nausea	8	7	0	1
Abdominal distention	7	6	0	1
Diarrhea	5	5	0	0
Constipation	6	5	1	0
Eructation	2	2	0	0
Epigastric burning	2	1	1	0
Pyrosis	3	0	2	1
All symptoms**	85	68	12	5

*Three cases responded only partially to Bentyl-phenobarbital, but complete relief was obtained when Bentyl-pentobarbital was substituted; one case required concurrent administration of Decapryn to obtain complete relief.

**In a total of forty-one patients.

*Kindly furnished by the Clinical Research Division of the Wm. S. Merrell Company under the trade name "Bentyl Hydrochloride."

drome, duodenal ulcer, gastric ulcer, primary dysmenorrhea, cholecystitis, biliary dyskinesia, pylorospasm, psychoneurosis, food sensitivity, diverticulosis, and mucous colitis which produced a variety of symptoms such as abdominal or epigastric pain suitable psychotherapy. In one case of gastric retention associated with an organic lesion (duodenal ulcer) there was some temporary, partial relief of symptoms, but the patient required surgical care for permanent relief.

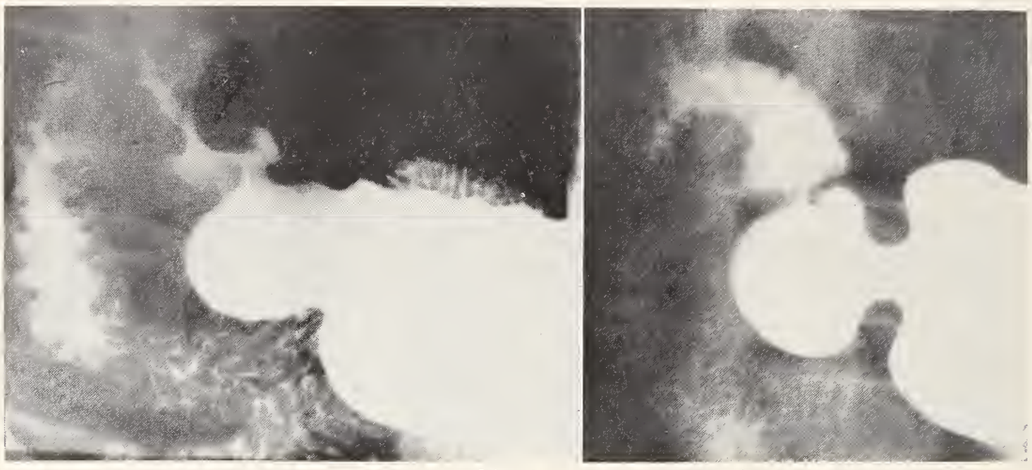


Fig. 4

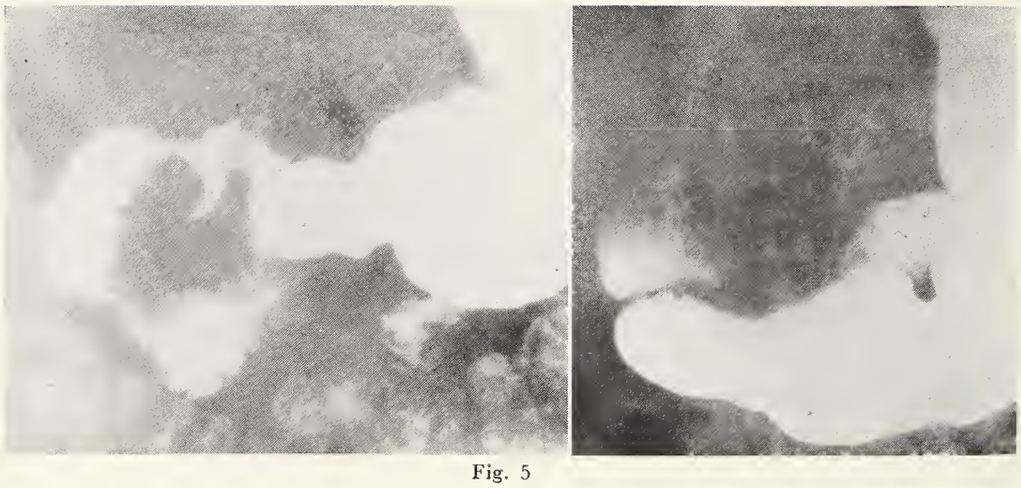


Fig. 5

Figures 4 and 5 illustrate two cases of peptic ulceration of the duodenum with considerable spasm and deformity, treated with ambulatory diets and Bentyl-antacid combination. Each tablet was made up to contain Bentyl hydrochloride (dimethylaminoethylcyclohexylcyclohexane carboxylate hydrochloride) 5 millograms with aluminum hydroxide 300 millograms and magnesium trisilicate 400 millograms. Eight tablets daily used in first two to four weeks of treatment, and thereafter six tablets daily in divided doses until evidence of healing.

Figure 4. (*Left*) Roentgenologic appearance of active duodenal ulcer in thirty-four-year-old man with clinical evidence of ulcer.

(*Right*) Roentgenologic appearance after twelve weeks of ambulatory treatment with diet and Bentyl-antacid combination. Marked clinical improvement.

Figure 5. (*Left*) Roentgenologic appearance of an active duodenal ulcer in a forty-eight-year-old man with history of recurring ulcer for seven years.

(*Right*) Roentgenogram taken 13 weeks after start of ambulatory treatment with diet and Bentyl-antacid combination.

or cramps, "gas," abdominal soreness and tenderness, nausea and vomiting, diarrhea and constipation, abdominal distention, eructation, epigastric burning, and pyrosis. As indicated in Tables I and II, the therapeutic response was surprisingly favorable, especially in the duodenal and gastric ulcer patients who received the Bentyl-antacid combination and patients suffering from dysmenorrhea. Poorest results were obtained in the patients who were frankly psychoneurotic, and were ultimately referred to psychiatric consultants for

Strangely enough, three of the patients who received only partial relief from the Bentyl-phenobarbital combination were rendered entirely free from symptoms when switched to Bentyl-pentobarbital, and one other did not obtain complete symptomatic relief until Decapryn (which has a mild atropine-like effect as well as a potent antihistaminic action) was added to the regimen. Perhaps these observations were the result simply of continued treatment, since the patients all received the usual dietary, supportive, and psychological

guidance and therapy, none of which can be replaced by any antispasmodic drug.

Side effects were virtually absent in this small series of forty-one patients. One patient suspected that she might be slightly dizzy from the drug, while two suspected nausea as a side effect. In one of these cases the nausea was probably a symptom of the duodenal ulcer that was present, and in the other it was definitely related to the bitter taste of the tablet and was no longer present when similar doses of the Bentyl-antacid were substituted. Perhaps capsules would be a more suitable pharmaceutical form than tablets for this compound.

Patients received treatment with Bentyl hydrochloride ranging from one week to three months, and in seventeen cases where the drug was administered long enough to justify blood counts, blood chemistry, liver function tests, and urine studies, no abnormalities were detected.

Fundamentally, effective antispasmodic drugs are of value largely in relieving symptoms, making the patient more comfortable, and perhaps in making the patient more co-operative while fundamental diagnostic and therapeutic procedures, some of which require time, are employed. The x-ray pictures in Figure 4 and Figure 5 indicate the healing of duodenal ulcers in two of the patients who experienced virtually complete relief from the ulcer pain while on the Bentyl-antacid compound. Further studies may perhaps show that the beneficial effects of antispasmodic therapy may be similar to those of other therapeutic procedures which set at rest the diseased or injured organ or structure.

Frequently the reduction in abdominal tenderness and occasionally even some rigidity associated with a decrease or cessation of subjective complaints offered a considerable degree of objective confirmation of the efficacy of therapy. This was particularly noteworthy in several of the gallbladder cases. Regularity of the stool habit in patients previously suffering from alternating diarrhea and constipation similarly confirmed the subjective response. General manifestations of improved appetite, strength, vigor, and sense of well-being were associated with the subjective improvement.

Conclusion

Bentyl hydrochloride, a new antispasmodic drug, has been studied in a small series of patients selected largely on the basis of failure to respond to atropine and the older synthetic substitutes. It has been well tolerated and generally effective, especially when given to duodenal or gastric ulcer patients in combination with an antacid. It does not replace surgery, diet, or psychotherapy when they are indicated.

Reference

1. Brown, B. B., et al: J. Am. Pharm. A., Sc. Ed. (in press).

MSMS

PSYCHIATRY AND THE DRIVER

(Continued from Page 1296)

(reports from the hospital, applications for driver's license, et cetera) that the individual has been in a mental institution, before his license is issued, he should be examined by a physician, preferably a neuropsychiatrist.

6. This examination, also including a probationary period, is especially indicated in cases of organic brain disease—cerebral arteriosclerosis, other senile conditions, neurological incapacitating conditions, schizophrenia, alcoholism, convulsive disorders, drug addiction, physical handicaps, feeblemindedness, manic depressives, any obsessive-compulsive states, and conditions as revealed. Some of the so-termed psychopaths, as the egocentric, are hazards.

7. All patients of state institutions should be fingerprinted.

8. All applicants for driver's license should be fingerprinted.

9. All fingerprints (7 and 8) should be searched in the Federal and State Bureaus and centrally located.

10. In cases in which it has been recommended by the psychiatrist that the driver's license be held up, these should not be released without approval and further observation and examination by psychiatrists. All hospital officials releasing committed patients should issue a letter approving or disapproving the patient being allowed to drive. A driving test may not determine the potentiality. Similarly in uncommitted cases, the examining private psychiatrist, as now is compulsive in California, should issue reports of patients treated for psychosis and should submit a letter rendering the patient unsafe as a driver.

11. Many studies have revealed that it is possible to make psychiatric predictions or prognoses, not only upon the Modus Operandi or analysis of the crime, accident, or commitment, but upon the consideration of other personality factors.

Incapacity

Case Report

By Joseph M. Erman, M.D.

Detroit, Michigan

ON December 29, 1940, at 2:55 p.m., Ben J. entered Receiving Hospital in coma. The next day at 4:35 p.m. he was dead. Ben was seventy-seven years old. He was well known to the North End Clinic, carrying a fantastic 300-plus hypertension at times.

Some history appears on the Receiving Hospital chart. Ben was getting about in the month of December, 1940. But he complained of headache and also of numbness and slight weakness of the right side. Paralysis was not apparent. On December 29 Ben got up and saw animals. He was put to bed and fell asleep. Later he could not be aroused in one hour's trying and was brought to the hospital.

Examination recorded at Receiving Hospital: Well-developed, undernourished. Skin: warm, dry. Tissue turgor lost. Pupils pinpoint although no morphia has been given. Blood pressure, right 210/110, left 230/90. Kussmaul and Cheyne-Stokes respirations. Auricular fibrillation. Apical impulse forceful. Bilateral ankle clonus, more marked on right. Babinski on right. Reflexes changing during examination. Right facial weakness and weakness right arm and leg. Liver enlarged one fingerbreadth. Pulse 94 to 148. Respirations 38 to 60; last 50. Temperature 100° to 104.6°; last 103.8°. Albumin one plus, urea 64 mg., Kline negative.

Treatment: Oxygen; digalen; 5 per cent glucose; sulphathiazole by stomach tube and sulphapyridine.

Impression: Cerebrovascular accident. Right hemiplegia. Hypertensive cardiovascular disease. Left ventricular hypertrophy. Auricular fibrillation. Bilateral broncho-pneumonia (hypostasis).

Five months previously Ben was in St. Mary's Hospital for right weakness and aphasia, staying three months, moving over to Burns Home for one month and home for the last month of his life.

The earliest record of the North End Clinic chart is dated August 31, 1931. Dr. Saul Rosenzweig elicited in the history that nine years previously Ben had been turned down for insurance on account of blood pressure over 200. Dr. Rosenzweig's impression: "Chronic degenerative heart disease, Class II, with hypertension and auricular fibrillation. Blood pressure 220/110."

On June 4, 1936, a blood pressure was recorded as 300/120!!! There was no deficit and no edema. All the time from 1931 to 1936 Ben had been taking digitalis faithfully. On February 23, 1937, his blood pressure was 300. On April 28, 1937, Ben presented himself with a complaint of a severe headache. He was warned, "Go to bed" because of the danger of cerebral hemorrhage. But for almost four years more this was forestalled.

X-rays in 1935 and in 1940 showed a pathological heart. Albumin was a trace to one plus but was negative at times. On two occasions one plus sugar appeared: January 5, 1937, and October, 1940. Fundoscopic was compatible with his age.

From August 5 to 28, 1937, Ben was a patient in Grace Hospital for hypertension, arthritis of lumbar spine, hypertensive heart disease and neuralgia.

A right inguinal hernia and later bilateral were treated with a truss. Vascular dermatitis venenata both forearms was treated over a period of the last seven years. Prostatitis was treated.

A note on July 11, 1939, showed that at age seventy-six years he was commissar and cook for two sick, grown daughters and three sons with whom he made his home.

Known hypertensive from age fifty to seventy-seven, Ben was probably hypertensive long prior to 1922. Known fibrillating nine years, he carried on an activity which might be viewed as amazing for his age. A curious speculation may be suggested to the psychiatrist as to why Ben's grown daughters were sick while he did the house cooking and shopping from age sixty-eight to seventy-seven while afflicted with hypertension, fibrillation and impending cerebral bleeding and paralysis.

MSMS

It seems not unfit that the scholar should deal plainly with society and tell them that he saw well enough before he spoke the consequence of his speaking; that up there in his silent study, by his dim lamp, he fore-heard this Babel of outcries. The nature of man he knew, the insanity that comes of inaction and tradition, and knew well that when their dream and routine were disturbed, like bats and owls and nocturnal beasts they would howl and shriek and fly at the torch-bearer. But he saw plainly that under this their distressing disguise of bird form and beast form, the divine features of man were hidden, and he felt that he would dare to be so much their friend as to do them this violence to drag them to the day and to the healthy air and water of God, that the unclean spirits that had possessed them might be exercised and depart. The taunts and cries of hatred and anger, the very epithets you bestow on me, are so familiar long ago in my reading that they sound to me ridiculously old and stale. The same thing has happened so many times over (that is, with the appearance of every original observer) that, if people were not very ignorant of literary history, they would be stuck with the exact coincidence, I, whilst I see this, that you must have been shocked and must cry out at what I have said, I see too that we cannot easily be reconciled, for I have a great deal more to say that will shock you out of all patience.

Every day I am stuck with new particulars of the antagonism between your habits of thought and action, and the divine law of your being, and as fast as these become clear to me you may depend on my proclaiming them.

—Ralph Waldo Emerson,
Contributed by Mental Hygiene Commission

Freedom or Serfdom

Will the people be servants of the state which owns all and directs all, or will the people direct the state?

What is a trillion dollars? I don't know what it means but our national debt is over one quarter of it. If 100,000,000 of our citizens made fifty dollars a week and turned over their entire income for one year, we could pay off that debt if the government would stop deficit spending. The interest alone on this amounts to five times as much as it cost to run the government in 1915. If this debt increases year after year, how long before the load will become unbearable? What happens to insurance, annuities, wages, pensions, securities, etc., when a default comes on government obligations? At that time the citizens of this country will realize *we* are the government. It is *our* loss.

What influence will the Korean war have on our financial and national security? I believe with Major Alexander P. de Seversky that this is but the first of many such incidents to come. It would appear that Formosa is next. I believe that we are taking the shortest cut to insolvency and will gain a position wholly untenable. It is my belief further (with de Seversky) that with our superior manufacturing abilities and know-how, we could control the air from our own shores and be the deciding factor for world freedom and peace, without being financially submerged.

In reviewing the seriousness of the problems confronting us today we look to Washington for reassurance. We find instead that the socialists have nearly completed the welfare state. We are told many departments are infiltrated with Communists, fellow travelers and spies.

At the moment we are losing this crucial battle on Americanism, round by round. Good American citizens are not creating a competent state of awareness right at home.

The American people when fully aroused of dangers confronting them have always responded in the past.

Men and women of medicine must continue to combat every menace to our national safety. Will the people be servants of the state which owns all and directs all, or will the people be and direct the state?

C. E. Umphrey M. D.

President, Michigan State Medical Society

President's

Message

Editorial

COMPULSORY FEDERAL CONTROL OF MEDICINE

NOT A CHANCE has been missed by the Administration to extend its program leading to the complete socialization of the medical services of the entire nation. In our September editorials we outlined the proceedings promulgated by which medical services to the populace, in case of catastrophy, would be implemented by Oscar R. Ewing and the U. S. Public Health Service.

We quoted a letter to the Governor from the Director, Civilian Mobilization Office: "We will be relying upon the Public Health Service for medical guidance for the states under our long-range civil defense planning."

The health services which will be necessary in case of extensive atomic or other attack causing catastrophic damages will require many times the personnel of the Public Health Services, or the State and local health offices. The health services which are to be rendered will be the private doctors who escape the holocast which we are presupposing will strike great areas of our country. Bearing this in mind, now read this excerpt from Chapter 16, "Health Services," N.S.R.B., Document 128, entitled "United States Civil Defense," Executive Office of the President, N.S.R.B.:

"In view of technical and professional requirements, the civil defense health and medical measures and services must continue to remain a responsibility of existing health agencies and individuals. These agencies and individuals will perform their wartime functions under civil defense rules and regulations.

"Close liaison between civil defense organization and peacetime health services is therefore imperative. Existing health agencies should, in wartime, be responsible for civil defense health requirements so that a creation of new duplication agencies will be avoided.

"This principle has been followed in the planning of Federal civil defense health services. The United States Public Health Service has agreed to provide medical and other officers to staff Federal civil defense central and regional offices.

"Initially this function may be carried out through the health personnel assigned to existing Federal Security Agency regional offices. Later the function will be moved to wherever the Federal regional civil-defense offices are established.

"In each state, the state health officer should be placed in charge of all state civil defense health and medical services; and cities should appoint local health officers in the same manner."

In addition to the attempts above referred to for gaining administrative control of medical services, the government, again through Oscar Ewing's department, has assumed another large slice of medical practice. (Will they have to build some more hospitals at fifty thousand dollars per bed?) The following communication was released on October 4, 1950:

"Veterans of the Spanish-American war, Boxer Rebellion and Philippine Insurrection are now eligible for outpatient medical care *without regard to service-connection*, the Veterans Administration announced today.

"Regulations implementing their right to such care, based on Public Law 791, 81st Congress, have been wired to all V-A Regional Offices.

"To be eligible, a veteran must have served some time between April 21, 1898, and July 4, 1902 (or July 15, 1903, if the service was in Moro Province, Philippine Islands), and was discharged other than dishonorably.

"An estimated 118,000 veterans have become potentially eligible for full medical and dental care in V-A clinics, or at home by fee basis physicians and dentists for any illness or disability."

There can be only one interpretation of that document; another 118,000 veterans, (and their families will follow) are placed upon the socialized medicine rolls for complete care, home, office, hospital, service connected or not.

Gradually Mr. Ewing and the Administration are attempting to take over the complete practice of medicine, one bite after another, without protest, and soon there will be nothing left worth fighting for.

In September we questioned if we were not already too late, but we pleaded for medically administered programs to supervise and distribute medical services. We expect people will be cared for, and whatever can will be done to alleviate and mitigate human suffering, but again Oscar Ewing has taken over some more directive powers. If an emergency arises he will be the central figure to whom all must look, even the doctors who think they are private practitioners.

CONTROL BY INTIMIDATION

IT IS NOW about two years since the splurge of administration inspired F.B.I. investigations of many of the state, county, and other medical organizations, including Michigan, Michigan Medical Service, and the A.M.A. itself. In Chicago, at the A.M.A. headquarters the F.B.I. men occupied the Board Room for months, and perused every piece of paper they could find in that mammoth office building.

In Oregon the Justice Department instituted suit against the Oregon State Medical Society, eight county medical societies, and certain officers. On September 28, 1950, Federal Judge Claude McColloch ruled that Oregon's organized medicine has not violated the Sherman anti-trust act in its prepaid service.

The government charged that the state medical society, a number of county societies, and several physicians sought to monopolize the field of prepaid medical care by refusing to deal with private agencies and by disciplining physicians who did deal with them.

"I hold that the Oregon physicians service is not a conspiracy, but rather an entirely legal and legitimate effort by the profession to meet the demands of the times for broadened medical and hospital service, eliminating the evils of privately owned concerns as well as the element of private profit," Judge McColloch wrote.

Recently the F.B.I. has been investigating the Illinois State Medical Society, having demanded and been granted access to all the records in Monmouth, the home of Harold M. Camp, secretary for twenty-six years. In reporting this investigation the *Chicago Tribune* said:

"Dr. Harry M. Hedge, president of the Illinois State Medical Society, denounced 'that man in the White House' for assigning the F.B.I. to investigate the society 'to help Senator Lucas' in the latter's campaign for re-election.

" 'It is nothing but a political move and even the F.B.I. doesn't like it,' Dr. Hedge asserted, adding that the society had three courses of action open to it.

" 'The first of these courses,' said Dr. Hedge, 'was to tell them "No!"—short of going to hell; the second was "Help yourself," and the third, which we have decided to adopt, is that we have nothing to hide.

" 'Having decided on the third course, we intend informing the F.B.I. agents that they can see anything they wish provided they make a request beforehand through our attorney for specific information. We don't want to buck them completely. We have done nothing wrong.' "

Later, the Illinois State Medical Society issued a statement to the press in which it said that the Council, governing body of the society:

"Is quite certain that the society has violated no law and the Council members are aware that the F.B.I. enjoys a well-deserved reputation for conducting investigations fairly and objectively.

"The Council looks with extreme displeasure upon the apparent motivation of the Department of Justice in ordering the investigation. Within the last two or three years, more than twenty-five state and county medical societies have been similarly investigated, apparently without results.

"This suggests very strongly to many physicians that such investigations are instigated primarily to punish or intimidate doctors and their professional organizations for their strong and determined opposition to the national administration's compulsory sickness insurance program.

"Under the circumstances many of the society's 10,000 members will doubtless find it difficult to avoid the conclusion that the investigation ordered by the Justice Department is a reprisal against them for their interest and individual activity in national political and legislative affairs."

We hope the Illinois activity is not a reprisal, but such proceedings have far-reaching effects, and could play right into the hands of the other power-mad bureaucrats who are always gaining more authority and control.

WHY CANCER PATIENTS DELAY SEEKING DIAGNOSIS AND TREATMENT

(Continued from Page 1270)

This discussion has dealt with the delays in cancer diagnosis which are the responsibility of the patient. Physicians also have a heavy responsibility in this matter. Refusal or neglect to make a careful examination of the patient often dooms that patient to critical dangers later on. The "I-didn't-think-of-cancer" excuse is no longer tenable, especially in view of the intensive professional education campaign that has been waged in Michigan during the past four years and is still continuing. *Cancer must be suspected and ruled out in every diagnosis by every physician.* Not until then will the physician have discharged his full responsibility to the community he serves. He also must take leadership in the education of his patients by teaching them the value of periodic examinations to detect cancer in early stages and the dangers in delay when suspicious symptoms are present.

EWING MUST GO!

Note: The following statement was released to the press associations from Chicago, Friday, September 29.

Chicago, September 29.—The American Medical Association, in a blistering indictment of Federal Security Administrator Oscar Ewing, which stated that he had twice been given a vote of "no confidence" in Congress, today characterized him as "a disappointed, embittered bureaucrat, who should be removed from office before he does further harm to the country."

Dr. George F. Lull, general manager of the AMA, who issued the statement, declared:

"Mr. Ewing, in his speech yesterday before the American Jewish Congress, descended to the depths of political demagoguery when he falsely implied that the American Medical Association was practicing discrimination against Jews.

"He has long been a fomenter of class hatreds and he is now attempting to incite religious and racial hatreds in the manner of Hitler's Germany.

"Mr. Ewing is a case of arrested political development and his irrational statements undoubtedly are a consequence of thwarted ambitions and a growing persecution complex, but he is wholly unfit for public office.

"The two Houses of Congress, in successive years, have given Mr. Ewing a decisive vote of 'no confidence,' by rejecting his attempts to gain Cabinet stature and control over the medical profession through the creation of a Department of Health, Education and Security.

"President Truman should finish the job and dismiss Mr. Ewing from the public service before he does further harm to the country."

AMERICAN MEDICAL ASSOCIATION ACCUSES JOHN D. DINGELL

Chicago, October 6.—A charge of misuse of the Congressional Record for unethical purposes was leveled today at Representative John D. Dingell, of Michigan, by the American Medical Association.

In an open memorandum sent to every member of Congress, Dr. Elmer L. Henderson, president of the AMA, called attention to a widely distributed reprint of Dingell's speech attacking the Association's nationwide advertising campaign as a "Twenty Million Dollar Smear Campaign," and asked the Congressmen if Dingell's "willingness to damage a medium of great public usefulness and dependability," was in their opinion, an ethical and proper use of the Congressional Record.

"I am well aware," said Dr. Henderson's memorandum, "that the Congressional Record did not carry the headline Congressman Dingell attributes to it. However, as Mr. Dingell is equally well aware, most Americans who see his ugly document, will not have the same knowledge."

The Dingell release is headed by the great seal of the United States and the imprint of the Congressional Record. Beneath these, in bold type appears a headline, "Help Fight Medical Lobby $20,000,000 Smear Campaign," followed by Dingell's speech as it was printed in the appendix of the Record.

Dingell's figure of $20,000,000 was called by Dr. Henderson "a fraudulent figure released by Mr. Oscar Ewing's office," the Federal Security Agency. Actually, the AMA president said, the Association is spending $1,110,000 on advertising in newspapers, magazines and radio. It is hoped, he said that "people who believe in the principle that 'The Voluntary Way is the American Way' will double the space the doctors have paid for."

"We have felt," the memorandum said, "that placing medicine's story as the doctors see it, in the public press, at the doctors' own expense, is in the finest American tradition," and asked Congressmen if they agreed with Dingell's charge that such use of advertising is an "insidious tactic to corrupt the public mind, or a proper exercise of free speech."

Pointing out that he himself is a life-long Democrat and that there "are probably more Democrats than Republicans among the officers and leaders of the American Medical Association," Dr. Henderson expressed surprise that Representative Dingell and other Democratic Party workers consider the matter of health insurance a partisan one.

"American medicine considers compulsory health insurance a matter of public health and welfare—not a matter of party politics. We have not sought party endorsement of any kind," he said.

Growth Through Co-operation

The Story of the Michigan Health Council

Depicted on the cover of this issue of THE JOURNAL is the expanding statewide program of the Michigan Health Council. Representing the important factor of co-operation in the illustration are the doctor of medicine, the businessman, the housewife, the farmer, the school teacher, the hospital administrator, all joining hands with other representatives of the local people in a community health council.

In eighteen months, a successful effort has been made to ascertain the health facilities of rural areas and industrial establishments, to define a common ground for community health effort, and to develop a clearing house for health information for all the people. The vehicle for these accomplishments has been the Michigan Health Council, an organization that for the first time has made twenty-one major health organizations realize that there is common advantage to be gained by working together.

The key to the present success has been the planning of a program before people *in their own communities*. Prospects look bright for the future as ideas spark in community after community to solve health problems by sheer impact of team play.

The Michigan Health Council itself is evidence of the possibilities for GROWTH THROUGH CO-OPERATION. It was originally organized in 1942 as a non-profit Michigan corporation for the purpose of providing promotional services to its members. The members were the Michigan State Medical Society, Michigan Hospital Association, Michigan Hospital Service, and Michigan Medical Service.

GROWTH THROUGH CO-OPERATION

* **Expansion of Voting Membership—from 4 to 24 members.**
* **Expansion of Associate Membership—from 0 to 27 Community Health Councils.**
* **Michigan Rural Health Conference Co-Sponsorship expanded from 41 to 68 organizations in 1950.**
* **Michigan Health Council Bulletin—expanded from 0 to 1,150 circulation.**
* **Projects—constant expansion of program of projects:**
  - **—Michigan Health Council—clearing house on health questions.**
  - **—Film Booking Information Service.**
  - **—Establishment of Reference Library.**
  - **—Compilation and publication of Michigan Health Council Directory of Health Organizations.**
  - **—Collaboration on Michigan Health Council—Brookings Institute Study on Availability of Medical Service in U.S.**
  - **—Civilian Defense Program—participation in the dissemination of information.**
  - **—Inauguration of Health Information Centers network in Michigan.**
  - **—Inquiries from 22 states for information on Michigan Health Council structure and program.**
  - **—Participation in 19 important state and national health conferences and activities.**
  - **—Awards for worthy community health accomplishments.**
  - **—Film production on Community Health Council organization procedure.**

With the impetus born of a new idea plus aggressive promotion, the Michigan Health Council when first organized carried on a program of information from the public platform on medical-socio economics and aided in such projects as nurse recruitment drives. But the organization ground to a slow walk because it had no local outlets and because its basic membership was limited. It just wasn't a common meeting ground for *all* health organizations in Michigan — it wasn't *the* Michigan Health Council. So in November, 1949, a halt was called to "catch a breath" and re-evaluate where the organization was going—where it could go and what should be done to make it "click."

A New Philosophy and New Activity

True Health Statesmanship entered the picture when The Council of the Michigan State Medical Society bought an idea. They decided to support financially a new concept of the Michigan Health Council. The new concept was, that the organization become a haven for the health projects of all

Groups such as the above, meeting together to study and plan for local health needs, define the word "Council" as "Common Meeting Ground."

Michigan organizations having a genuine major interest in health and that it provide a mechanism for planning a construction program before people in their own home town.

The Michigan State Medical Society realized that control by financial strength acted as a barrier to participation by organizations with assets other than those of a financial nature. Consequently, a series of meetings of major health groups brought forward changes in the By-Laws of the Michigan Health Council so that if any group were to dominate in the organization it would be by sheer interest or participation. The Michigan State Medical Society backed its decision with an outright grant of $7,500. Its leadership was closely followed by Michigan Medical Service and by Michigan Hospital Service with grants of $7,500 each.

Launched upon its new career the Michigan Health Council on February 19, 1950, established offices in Lansing under the direction of the newly employed Executive Secretary, Eugene Wiard.

J. Hirschman, M.D., Detroit (*extreme right*) and J. R. Rodger, M.D., Bellair (*third from right*) conducting a Rural Health Conference discussion panel.

"Established offices" is a nice organizational phrase. Actually Mr. Wiard found himself without a chair or a desk! However, the new Executive Secretary proceeded to renovate, repaper and repaint the office space and at the same time set out to beg, borrow and st— acquire the necessary equipment to get going. Thanks to the co-operation of Michigan Medical Service—Michigan Hospital Service and Michigan State Medical Society who "advanced" enough equipment, supplies and working materials to get started, the Michigan Health Council was functioning in no time and going about the business of its major objective of encouraging the development of community health councils, its No. 1 project.

A. S. Brunk, M.D.
First President

Community Health Councils Stimulated

One of the early Community Health Councils organized illustrated the value of the community organization working together for a common cause. A two-county area with a jointly sponsored county public health department found itself suddenly facing a serious situation when the commissioners of one county voted to discontinue their appropriation.

A community health council was brought into being quickly with broad representation from many health organizations in the area and from the people at large. It met regularly to chart a course designed to encourage the supervisors to rescind their decision and provide the needed appropriation. This concerted action was successful in demonstrating the people's interest in continuation of the department. Soon the supervisors reversed their decision and appropriated funds and a health department again services people of this area.

Twenty-seven community groups now hold associate membership in the Michigan Health Council and organizational activities are going on in five other counties at this time (Midland, Montcalm, Kalkaska, Crawford and Clinton counties). Preliminary organizational plans are developing in three other Michigan counties simultaneously.

Michigan Rural Health Conference

While this is held to be its first and most important project, a number of other important activities have been developed and accomplished. Under the aegis of the Michigan Health Council the annual Michigan Rural Health Conference has grown, in a period of four years, from the idea stage to a positon of recognition as one of the important health meetings on Michigan's Fall Calendar. The Rural Health Conference originally was sponsored financially by the Michigan State Medical Society. Through the able leadership of such members as J. S. DeTar, M.D., E. I. Carr, M.D., H. B. Zemmer, M.D., C. E. Umphrey, M.D., J. R. Rodger, M.D., and others, the Conference has experienced a constantly expanding history as evidenced by the growing list of Co-Sponsoring organizations which has been increased from 30 groups in 1947 to 68 Michigan organizations in 1950.

J. S. DeTar, M.D.
President, 1950

For the past two years this conference has been sponsored financially by the Michigan Foundation for Medical and Health Education, Inc., which has extended a hand of co-operation and an offer of co-sponsorship to any worthy Michigan health group. Attendance at the two meetings has grown from several hundred in 1947 to more than 500 in 1950.

Directory of Health Organizations

The Michigan Health Council Directory of Health Organizations in Michigan, developed by the Michigan Health Council, fills a long-standing need in Michigan for such a reference volume. The Directory lists alphabetically more than 90 important health organizations operating in Michigan giving the routine directory information as to location, headquarters, officers etc. plus a review of each organization's state and local level program.

Functioning as a medium for the dissemination of information, the Michigan Health Council through its monthly Bulletin (circulation 1,150), its Community Health Councils, and its participation in conferences and meetings has become an important medium of contact between the Michigan State Medical Society and other state level

(Continued on Page 1349)

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

Approximately 1,000 Michigan public health workers will meet in the Pantlind Hotel and Civic Auditorium, Grand Rapids, November 29 to December 1, in the thirtieth annual Michigan Public Health Conference which will consider new weapons against disease and the role of public health people in disaster and in civil defense.

At the opening session on Wednesday afternoon, Haven Emerson, M.D., American Public Health Association Consultant; Franklin H. Top, M.D., of the University of Minnesota; Jerome Conn, M.D., of the University of Michigan; Albert E. Heustis, M.D., State Health Commissioner, and F. S. Leeder, M.D., Director of the Division of Disease Control, Records and Statistics, will discuss new disease fighting drugs and diagnostic procedures.

The Thursday program is devoted entirely to section meetings in which public health directors, public health dentists and dental hygienists, public health nurses, engineers and sanitarians, nutritionists, venereal disease personnel and clerks will discuss mutual problems and responsibilities.

How to meet health problems in time of disaster will be considered at the Friday morning general session.

Members of the medical profession will be welcome at any or all sessions of the conference.

To conserve the hearing of Michigan school children and to help those handicapped by hearing loss, the Michigan Department of Health, for the eighth consecutive year is providing hearing consultation service to Michigan communities. Requests for the service have been received from school or community groups in thirty counties in the state so far this year. Requests are routed through the local health departments.

In the hearing conservation programs, group hearing tests are given by local people trained by Michigan Department of Health hearing consultants. When the initial test indicates an abnormal hearing condition, the Department consultants follow up with individual tests to determine the amount of hearing loss. Local health departments, school people and community groups then arrange for parents to take the child to ear specialists for examination and proper care.

More than 450,000 Michigan children have been given group audiometer tests since the Michigan Hearing Conservation Program began in January, 1943. Of these, three per cent showed some hearing loss. Of the children who received medical treatment, more than 77 per cent improved, 50 per cent of them to normal hearing.

Robert June, M.D., has joined the staff of the Division of Laboratories, Michigan Department of Health, as co-ordinating physician. Dr. June is a graduate of the Loyola University School of Medicine, Chicago.

John Lynch, M.D., industrial health physician with the Division of Industrial Health, resigned effective September 29 to take a position in industry.

John Mancini, D.D.S., has joined the staff of the Section of Dentistry to be in charge of the Sturgis Dental Clinic.

Maternal and Child Health program administrators from thirteen midwest states observed the hearing conservation trailer at a Children's Bureau conference in Chicago early in October. This was made for the Michigan Department of Health under the supervision of its hearing consultants.

A total of 155,585 fair patrons visited the Michigan Department of Health's tent show "Since Adam and Eve" which presented venereal disease facts on the midways of eight county and state fairs during the summer and early fall.

A supplement to the 1950 catalog of the Michigan Department of Health Film Loan Library has been prepared and can be obtained from the Department. The Film Loan Library now has 242 different motion picture films, film strips and seven sets of slides, all on health subjects, which can be borrowed for showing in local groups.

Last year 469,407 school children and adults in seventy-eight counties of the state attended 10,471 showings of films and slides from the Library.

Beginning in January, 1951, the Division of Tuberculosis and Venereal Disease Control will schedule the visits of mobile chest x-ray units to the local communities of the state a year in advance. Request for a mobile chest x-ray unit to visit a community is made through the local health department. This scheduling a year in advance does not include the county fair surveys.

Detailed plans and specifications for a new laboratory building for the Western Michigan Branch laboratory of the Michigan Department of Health in Grand Rapids are now being prepared by the Department. Funds for the much-needed building will be requested from the state legislature. The Western Michigan Branch laboratory provides diagnostic and analytic services for physicians and hospitals in twenty-nine western counties of the state.

Col. Edward D. Rich, who became Michigan's first State Sanitary Engineer in 1911 and served as Director of the Division of Engineering of the Michigan Department of Health for thirty-five years, died in his Lansing home September 29.

An outstanding authority in his field, Colonel Rich pioneered in water sanitation, sewage treatment, chlorination and resort sanitation in the state and in the nation.

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Communications

Wilfrid Haughey, M.D., Editor,
610 Post Building
Battle Creek, Michigan

Dear Doctor:

The editorial on "Trauma and Cancer" in the August issue of THE JOURNAL is a sane and common sense approach to a controversial subject. We feel that our Legal Department should have an opportunity to read it.

Hence, we are asking if you have a reprint that one might obtain to pass on to those who handle these cases in the courts.

Very truly yours,

R. G. COLYER, M.D.
Medical Department,
Fisher Body Division,
General Motors Corp.
Detroit.

September 25, 1950

* * *

U. S. TREASURY DEPARTMENT
Office of Commissioner of Internal Revenue
Washington 25, D. C.

Michigan State Medical Society
2020 Olds Tower
Lansing 8, Michigan

Gentlemen:

Reference is made to the information submitted by you for use in determining the status of the Grand Rapids Rheumatic Fever Control Center for Federal income tax purposes.

The records of this office disclose that in Bureau ruling dated June 7, 1939, you were held to be entitled to exemption from Federal income tax under the provisions of section 101 (7) of the Internal Revenue Code and corresponding provisions of prior revenue acts. This ruling was affirmed May 22, 1944.

The information submitted discloses that a standing committee for the Rheumatic Fever Control program is selected annually by the President of your organization. The purposes of the program are finding cases, diagnosing them, and the training and education necessary to bring the disease under control in Michigan. This work is carried on through the Rheumatic Fever Control Centers (fifteen in Detroit and twelve in other parts of the State) the chairmen of the Centers are nominated by the county medical society in whose jurisdiction the Center is located and are appointed by your organization. These Centers are financed through contributions from various organizations and registration fees paid by individuals using the services of the Center. Since these Centers are

(Continued on Page 1328)

Say you saw it in the Journal of the Michigan State Medical Society

from *head* to *toe*

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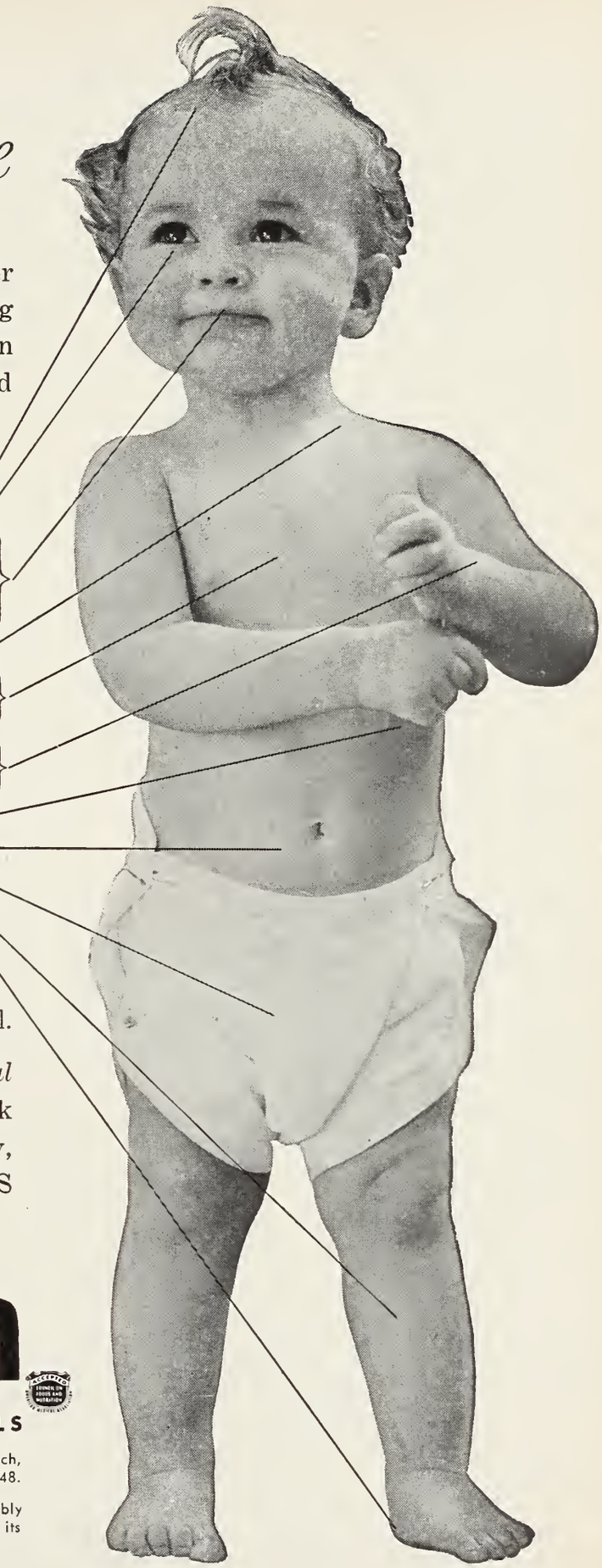

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1. "A Study of Enriched Cereal in Child Feeding" Urboch, C.; Mock, P. B., and Stokes, Jr., J: Pediatrics 1:70, 1948.

*Cerevim contains neither vitamin A nor C but possibly exercises an A-and-C sparing effect attributed to its high content of protein and major B vitamins.

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U. S. TREASURY DEPARTMENT

(Continued from Page 1326)

an activity maintained and operated by you a separate ruling is not necessary with respect to their status.

Based on the foregoing it is held that **contributions made to you to be used exclusively for the operation of the various Centers are deductible by the donors in computing their taxable net income in the manner and to the extent provided by section 23 (o) and (q) of the Internal Revenue Code, as amended.***

Bureau letter dated July 27, 1950, addressed to the Grand Rapids Rheumatic Fever Control Center, in which it was advised to file income tax returns since it had failed to establish that it was entitled to an exempt status, is hereby revoked.

By direction of the Commissioner.

Very truly yours,

E. I. McLarney,
Deputy Commissioner

*Lines set in boldface type by editor's direction.

* * *

October 5, 1950

Dr. L. Fernald Foster, Secretary
Michigan State Medical Society
Lansing 8, Michigan

Dear Dr. Foster:

I wish to express my deep appreciation of the Council's approval of our program for the State of Michigan.

I know of no one in our program who has been more vital in developing this program than Dr. Zemmer, himself. I am glad that he stressed that no treatment would be involved in these clinics.

It is the policy of our Board, based upon evidence from physicians and patients, to attempt in every possible way to cement and improve the relationship between the Epileptic and his private local physician. The Board believes that treatment in this illness can only be adequately carried out by the medical man who knows his patient well and who carries a constant attendance.

We have had continual experience that indicates to us that a part of the illness of convulsions is that the patient wanders from doctor to doctor never giving one man adequate chance to try his skills. We feel it is vital in adequate planning for the Epileptic to prevent further occurance of this behavior which probably is also a symptom of the total condition.

It is our prime desire that we spread what little is known scientifically and medically about this illness to the medical men who have to handle the problems.

I hope you will allow us to call upon you again for help in carrying out our plan.

Sincerely,

A. J. DerByshire, Ph.D.
EEG Department
Michigan Epilepsy Center

96 West Ferry Avenue
Detroit 2, Michigan

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MICHIGAN AUTHORS

Walter G. Kin, M.D., Ann Arbor, Mich., published an article, "Treatment of Far Advanced Carcinoma of the Breast: Present Status of Testosterone Therapy," in the A.M.A. *Archives of Surgery,* October 1950.

John Reid Brown, M. D.; Solomon G. Meyers, M.D.; Joseph L. Posch, M.D; and **Owen Deneen, M.D.,** of Detroit, Mich., published an article, "Massive Hemorrhage from the Upper Gastrointestinal Tract: A Study of Three Hundred and Twenty-Four Cases Observed at the Detroit Receiving Hospital Over a Nine-Year Period," in the A.M.A. *Archives of Surgery,* October, 1950.

F. Bruce Fralick, M.D., of Ann Arbor, Mich., published an article, "The Orbit: Review of the Literature," in the *Archives of Ophthalmology,* September, 1950.

Henry T. Johnson, M.D., Lansing, Mich.; **Jerome Conn, M.D., Vivian Iob, Ph.D.,** and **Frederick A. Coller, M.D.,** of Ann Arbor, Mich., published an article, "Post-operative Salt Retention and its Relation to Increased Adrenal Cortical Function," in the *Annals of Surgery* for September, 1950. This paper was presented before the Annual Session of the American Surgical Association at Colorado Springs, Col., on April 12, 1950.

Joseph A. Johnston, M.D., Detroit, presented two papers at the annual session of the State Medical Society of Wisconsin, "The Special Problems of the Adolescent Child," and the "Factors Which Affect Growth as Measured by Nitrogen and Calcium Studies," October 4, 1950. He also conducted the Round Table on "Chronic Intestinal Indigestion."

Jerome W. Conn, M.D., Ann Arbor, presented a paper "Clinical Implications of ACTH and Cortisone" at annual session of the State Medical Society of Wisconsin, October 4, 1950.

Hermann Pinkus, M.D., Monroe, Mich.; and **John N. Grekin, M.D.,** Detroit, published an article, "Sporotri-

(Continued on Page 1332)

WAYNE UNIVERSITY COLLEGE OF MEDICINE AND THE ALLERGY CLINIC OF DETROIT RECEIVING HOSPITAL

Present

Symposium on Modern Concepts of Allergic Diseases

Wednesday, November 29, 1950, Wayne University College of Medicine, Auditorium

Chairman, Jack Rom, M.D.

Time	*Subject*	*Speaker*
Morning Session		
9:00- 9:35	"Immunologic Aspects of Allergic Disease"—recent progress and present status	Dr. Sidney Friedlaender, Instructor in Clinical Medicine
9:40-10:10	"Pharmacologic Aspects of Allergic Diseases"	Dr. Victor A. Drill, Professor of Pharmacology
10:15-10:45	"Pathology of Allergic Disease"	Dr. Osborne A. Brines Professor of Pathology
	Intermission	
11:00-11:30	"Internal Medicine and Allergy"—recent progress, the collagen diseases, et cetera	Dr. Samuel Jacobson, Assistant Professor of Clinical Medicine
11:35-12:05	"Allergy and the Cardiovascular System"	Dr. Jack Rom, Instructor in Clinical Medicine
	Lunch	
Afternoon Session		
1:30- 2:00	"Gastrointestinal Allergy"	Dr. Homer Howes, Instructor in Clinical Medicine
2:05- 2:35	"Neurological Aspects of Allergy"	Dr. Gabriel Steiner, Professor of Neuropathology
2:40- 3:10	"Psychiatric Aspects of Allergy"	Dr. James C. Moloney, Associate Professor of Psychiatry
	Intermission	
3:25- 3:55	"Allergic Dermatoses"	Dr. Loren W. Shaffer, Professor of Dermatology
4:00- 4:30	"Ocular Allergy"	Dr. Albert D. Ruedemann, Professor of Ophthalmology
4:35- 5:05	"The Management of Allergic Problems in the Surgical Patient"	Dr. Alex S. Friedlaender, Instructor in Clinical Medicine

There will be no registration fee, but all interested in attending the sessions should write to Jack Rom, M.D., Wayne University College of Medicine, Detroit, Michigan.

An Observation on the Accuracy of Digitalis Doses

Withering made this penetrating observation in his classic monograph on digitalis: "The more I saw of the great powers of this plant, the more it seemed necessary to bring the doses of it to the greatest possible accuracy."[1]

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1. *Withering, W.:* An account of the Foxglove, London, 1785.
2. *Rimmerman, A. B.:* Digilanid and the Therapy of Congestive Heart Disease, Am. J. M. Sc. *209:* 33-41 (Jan.) 1945.

Literature giving further details about Digilanid and Physician's Trial Supply are available on request.

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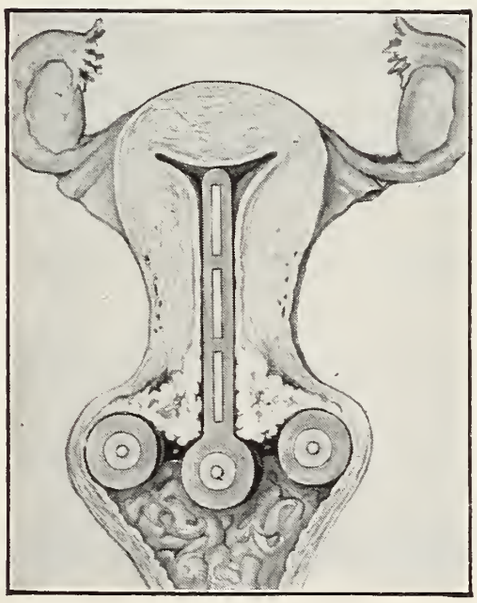

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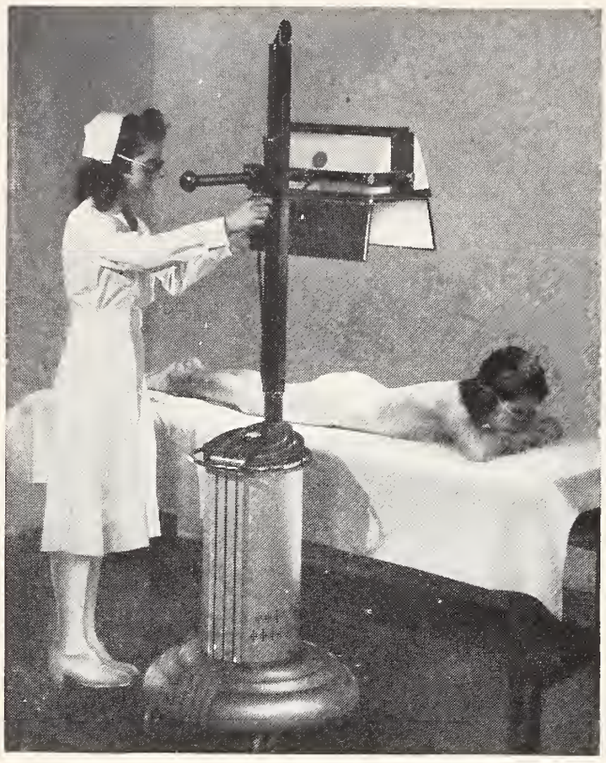

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(Continued from Page 1330)

chosis with Asteroid Tissue Forms," in the *Archives of Dermatology and Syphilology,* May, 1950.

W. S. Reveno, M.D., Detroit, had a paper on "Intestinal Lipodystrophy" (Whipples Disease) published in the *New England Journal of Medicine* for August 10, 1950.

Meyer O. Cantor, M.D., and Roland P. Reynolds, M.D., Detroit, are authors of an original Article "Gelfoam and Thrombin in Gastroduodenal Bleeding" which appeared in *The Journal of Laboratory and Clinical Medicine,* June, 1950.

* * *

Recent appointments to the Wayne University College of Medicine staff:

Dr. Willard George McCullough has been assigned as Assistant Professor of Microbiology. Dr. McCullough has his Ph.D. degree from the University of Wisconsin. Dr. McCullough was formerly in the medical bacteriology department at the University of Michigan, and his fields of research have been in microbial biochemistry and microbial nutrition, studying growth requirements of the organisms occuring in brucellosis and anthrax. During World War II, he served in the Army as bacteriologist in bacterial nutrition at Camp Detrick for three years.

Dr. Harold Dwight Priddle has just been appointed as Professorial Associate in the Department of Obstetrics and Gynecology. Dr. Priddle is sponsored by a special grant from the Michigan State Department of Health. Dr. Priddle received his M.D. degree from Vanderbilt University School of Medicine, and comes to us from the Chicago Lying-in Hospital.

Dr. Marion Barnhart has been appointed Instructor in Physiology, replacing Dr. Earl Gerheim. Dr. Barnhart received her Ph.D. degree from the University of Missouri.

* * *

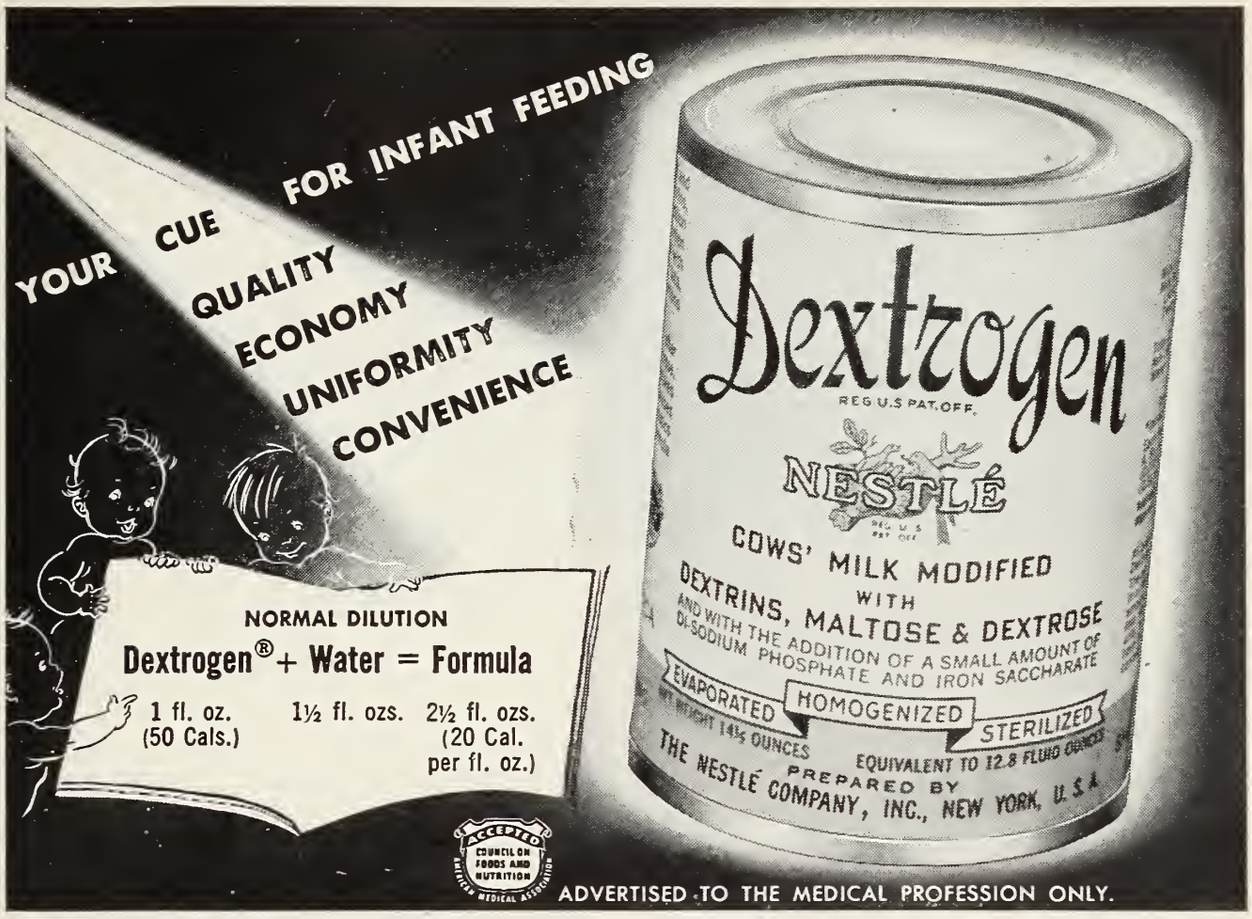
Senate Committee Staff Working out Questionnaire on Medical Services.—Dr. Dean A. Clark's committee is working out final details of a questionnaire designed to bring in information on health insurance plans and state and local health services. The committee was appointed by the Senate Labor and Public Welfare Committee, with instructions to report back by February 1, 1951. The questionnaire will be sent to all national health, hospital and medical care insurance companies and organizations and to a cross-section of smaller units operating in this field.

* * *

Red Cross Responsible for Nurses' Aide and First Aid Training.—Red Cross has been given two more major civil defense responsibilities. In addition to supervising the nationwide blood program, it will co-ordinate first aid courses and courses for home nursing training and nurses' aide training. It is estimated that 20,000,000 persons may eventually participate in first aid courses, and that 100,000 women may receive home nursing or nurses' aide training. Work has been completed on a

(Continued on Page 1334)

Say you saw it in the Journal of the Michigan State Medical Society



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(Continued from Page 1332)

first aid handbook, and some first aid courses have been started. Appeals to the public and health profession have been made by W. Stuart Symington, NSRB chairman, and General George C. Marshall, Red Cross director. Dr. Ross T. McIntire, director of the Red Cross blood program, made a particular appeal to the medical profession. "We look to the medical profession for strong support," he said. "This is something bigger than we have ever undertaken before. If we are to succeed, we can do so only with the wholehearted co-operation of individual physicians. Up to now we have met all demands, but there is a long pull ahead."

* * *

State "P. & A." Groups Formed for Doctor Draft.—The Government has revived, in effect, the procurement and assignment system of World War II days to pass upon availability of physicians and dentists for military service. After weeks of delay, proclamation of the doctor-draft issued from White House on October 5 and by nightfall telegrams were being sent to prospective chairmen of advisory groups in all states and territories. For some unfathomable reason, all this was kept quite secret but we can report not only that the foregoing is factual but also:

1. Each state advisory group is to be headed by a doctor of medicine and is to include a dentist, the state public health officer (or his representative) and such other members as the chairman may designate.

2. The parent agency, sitting in Washington, will be the National Advisory Committee on the Selection of Doctors (sic), Dentists and Allied Specialists which was created Wednesday by President Truman. Its chairman and membership coincide with Health Resources Advisory Committee to National Security Resources Board, Dr. Howard A. Rusk being head of both groups.

3. David M. Heyman, chairman of the board of Health Insurance Plan of Greater New York, has resigned from the NSRB advisory body, hence is not a member of the draft advisory committee. He will be replaced by a physician. Quitely and unannounced, his resignation was turned in when decision was made to have the NSRB health advisors double as draft counselors. Since Heyman was sole layman on the 8-member board, and doctor-draft law requires that all members of National Advisory Committee be professionals in health sciences, his departure was inevitable.—WRMS, Oct. 9, 1950.

* * *

Highlights of Proclamation.—First registration, taking in former ASTP's and V-12's in medicine, dentistry, and veterinary medicine who served less than twenty-one months military duty following completion of professional training, is scheduled for October 16. Doctors of osteopathy will not be required to register. Selective Service will fix registration dates for doctors of medicine, dentists and veterinarians—up to age fifty—who do not fall within the first-target bracket. The latter (class of October 16) includes not only ex-ASTP's and V-12's but also those deferred from military duty for purpose of

(Continued on Page 1336)

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(Continued from Page 1334)

continuing professional education. Governors of all states and territories are requested by President Truman to co-operate "to accomplish effective and complete registration."—WRMS, Oct. 9, 1950.

* * *

Rudolf J. Noer, M.D., Detroit, has been named Assistant Dean of Wayne University College of Medicine by the Detroit Board of Education.

Congratulations, Dr. Noer!

* * *

Poor Roads Contribute to Poor Health.—A Doctor of Medicine can't get to a patient or an ill person can't get to a doctor or a hospital, over bogged down roads.

Statement from a Texas representative at Conference on M.D. participation in Health Councils, Detroit, October 1, 1950.

* * *

Talks on Atomic Energy are available by members of the Committee on Atomic and Allied Procedures—refer requests to Chairman A. A. Humphrey, M.D., 183 West St., Battle Creek.

* * *

"Already the Hill-Burton Hospital Construction program has been cut 50% for current fiscal year, from $150 Million to $75 million."

Washington Report on the Medical Sciences, Sept. 18, 1950.

Meanwhile Social Security has been increased by millions and millions (through HR. 6000) representing in some areas of endeavor a waste of funds through overlapping of services and the extension of unimportant projects.

* * *

Fourth Clinical Session of AMA in Cleveland, December 5-8.—The Fourth Clinical Session of the American Medical Association will be held in Cleveland, December 5-8.

The scientific sessions and the scientific and technical exhibits will be presented in the Cleveland Municipal Auditorium. Meetings of the House of Delegates will be held in the Statler Hotel.

* * *

White House Conference on Children and Youth.—This meeting will be held in Washington, D. C., December 3-7, 1950. The state counterpart—the Conference on Children and Youth in Michigan—was held at East Lansing, September 14-15. Four MSMS representatives were in attendance.

* * *

No Rh Testing.—The budget of the Michigan Department of Health Laboratories was reduced at the recent session of the Michigan State Legislature. It has, therefore, become necessary to eliminate Rh testing from the list of routine services offered by the Laboratories.

* * *

You may look for the Socialists to renew their attempt to have Federal Aid to Medical Education legislation enacted early in the next session of Congress. Woven into the plot will be a "patriotic" plea of "our national

(Continued on Page 1338)

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(Continued from Page 1336)

safety is dependent on having more practicing physicians and Federal Aid to Medical Education is the solution to the problem."

This strategy was revealed by Oscar Ewing in a speech before the American Jewish Congress at New York when he said: "In a period of mobilization, when our troops are committed in Korea and when we are building an armed force of millions of men, it is more than serious (lack of doctors according to Mr. Ewing). "It is critical."—A.A.P.S. President Jos. C. Burten, M.D.

Michigan's tuberculosis records for 1949 show the number of deaths and new cases to be highest among older men, next highest among younger women.

	TB Deaths	*New TB Cases*
TOTAL	1,400	5,953
MEN Age 40-70	614 (43.8%)	1,908 (32.0%)
WOMEN Age 20-50	267 (19.0%)	1,453 (24.4%)

Children between ages 5 and 15 had only 1 per cent of the year's tuberculosis deaths and less than 4 per cent of the new cases.

Michigan Tuberculosis Association

The Society for Investigative Dermatology, at its last annual meeting, elected the following officers for the coming year:

For President: Dr. Marion B. Sulzberger, New York

For Vice President: Dr. Nelson Paul Anderson, Los Angeles

For Secretary-Treasurer: Dr. Herman Beerman, Philadelphia

For Director: Dr. Chester N. Frazier, Boston

At this meeting the Society selected Atlantic City as the place for their next annual two-day meeting in 1951.

* * *

Milton Shaw, M.D., of Lansing was honored by the citizens of Morrice, Michigan, on July 6, 1950, with a testimonial dinner on the occasion of the doctor's birthday. Friends from Detroit, Farwell, Gaines, Jackson, Lansing, Perry and Owosso, including his first school teacher, were present to do hometown honor on the occasion of Dr. Shaw's sixty-first birthday.

* * *

The September, 1950, Muskegon County Medical Society Bulletin was a memorial issued to the late Robert J. Douglas. His photograph on the cover and a fitting eulogy were features of this Number.

* * *

The cost of medical care (including drugs) for the year 1949 was 45 per cent higher than in the "normal" years of 1935-39, while the **cost of living was up 69 percent.**

(Continued on Page 1340)

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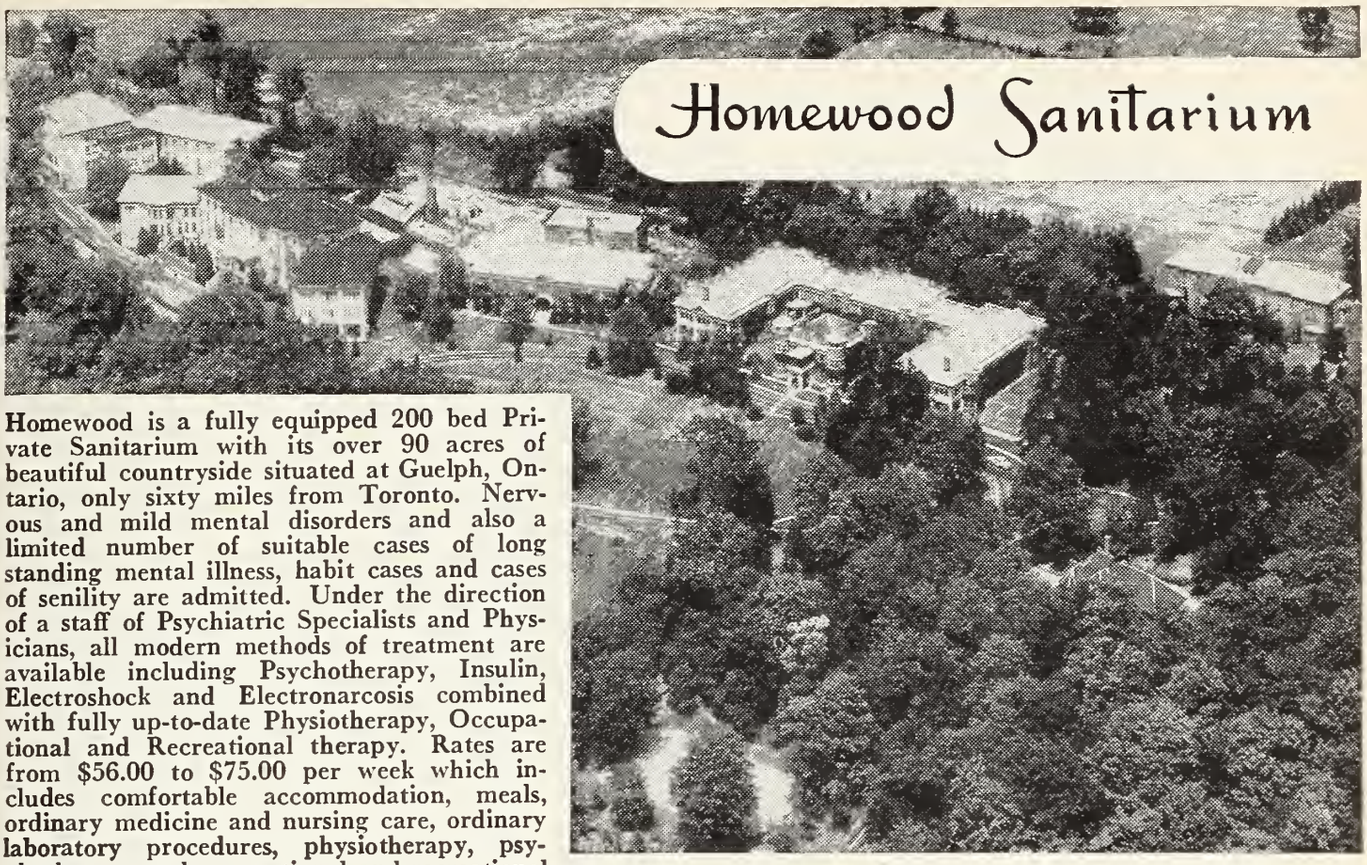

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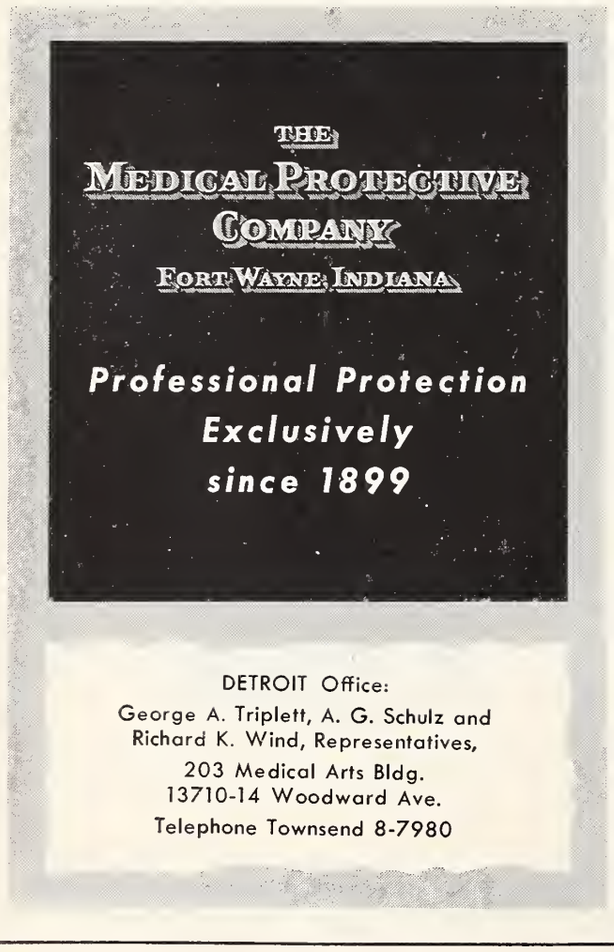

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(Continued from Page 1338)

Included in the over-all medical figure were doctors' fees, up 38 per cent; dentists fees, up 51 per cent, prescriptions, up 37 per cent; and hospital rates, up 127 per cent—but the average stay in hospitals was shorter so that the patient's bill went up 67 per cent.—*Time*, Aug. 7, 1950.

* * *

American Academy of General Practice of Michigan: 1950-51 officers are: President: L. T. Henderson, M.D., Detroit; President Elect: E. C. Long, M.D., Detroit; and Secretary-Treasurer: Harold Raynor, M.D., Detroit.

* * *

The American Academy of General Practice of Wayne County officers are: President: John A. Maloney, M.D.; Vice President: P. C. Gittings, M.D.; Secretary: M. H. Marks, M.D.; and Treasurer: Harold F. Raynor, M.D.

* * *

The American Academy of General Practice of Wayne County held its fourth annual Postgraduate Lectures at the Rackham Memorial Building, Detroit, October 25-26. Speakers included: Gordon Bell, M.D., Toronto; Daniel Hurst, M.D., Detroit; Mr. George Hood, Detroit; Thomas J. Heldt, M.D., Detroit; Warren B. Cooksey, M.D., Detroit; Roscoe Cavell, M.D., Detroit; Herman Scarney, M.D., Detroit; Joseph Seifter, M.D., Philadelphia; E. C. VonderHeide, M.D., Detroit, Arthur Schiller, M.D., Detroit, Howard C. Walser, M.D., Detroit, Eugene A. Osius, M.D., Detroit; M. E. Bachman, M.D., Detroit; Lionel Braun, M.D., Detroit; Harold M. Rosen, M.D., Detroit; George Smith, M.D., Detroit; E. S. Gurdjian, M.D., Detroit; and Carl H. Schulte, M.D., Detroit.

* * *

The Auditorium at Wayne County General Hospital and Infirmary, Eloise, was officially dedicated the "T. K. Gruber Memorial Auditorium" on September 29, in the presence of civic industrial and union leaders of Detroit and Wayne County.

The late Dr. Gruber was a long-time member of the Michigan State Medical Society, one of the MSMS Delegates to the AMA House of Delegates at the time of his untimely death, and was Past President and Past Treasurer of the Wayne County Medical Society.

* * *

John R. Giffen, M.D., oldest practicing physician in Van Buren County, celebrated his 81st birthday September 29, 1950, as he began his 57th year of practice in Bangor, Michigan. Dr. Giffen is a member of the MSMS Fifty Year Club.

Congratulations Dr. Giffen!

* * *

Arthur B. McGraw, M.D., and H. Saul Sugar, M.D., both of Detroit, were guest speakers at the 1950 Cleveland Assembly of the International College of Surgeons, United States Chapter, under the Presidency of Custis Lee Hall, M.D., Washington, D. C., with George Curtis, M.D., of Columbus, Ohio, as General Chairman.

* * *

(Continued on Page 1342)

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(Continued from Page 1340)

The Michigan State Board of Registration in Medicine, on September 22, gave notice that it reinstated the Michigan medical licensure of John W. Warren, M.D., on June 15, 1950.

The Second Industrial Health Day, scheduled for Wednesday, April 4, 1951, will be held in the Horace H. Rackham Educational Memorial, 60 Farnsworth, Detroit.

C. E. Umphrey, M.D., President of the Michigan State Medical Society, will be Toastmaster at the banquet to be held at the Wardell-Sheraton Hotel (one block from the Rackham Memorial Building), after the scientific program.

Dr. Lillian Gilbreth ("Cheaper by the Dozen") will be guest speaker at the banquet.

Sponsors of the Michigan Industrial Health Day are: Michigan Association of Industrial Physicians and Surgeons, the MSMS Committee on Industrial Health, the Medical School of the University of Michigan, the School of Public Health of the University of Michigan, Wayne University College of Medicine, and the Division of Industrial Health of the Michigan Health Department.

The MSMS Emergency Medical Service Committee is building a library of books and booklets and current literature on the general subject of "Civilian Defense."

Through the efforts of Committee member William Henry Gordon, M.D., Detroit, the following initial contributions have been made to the library, located in the MSMS Executive Office, 2020 Olds Tower, Lansing 8, Michigan:

1. Civilian Defense of the United States (Dupuy and Carter), published by Farrar and Rinehart, Inc., New York.
2. Civil Air Defense (Augustin M. Prestiss, Ph.D., Lt. Col. General Staff Corps, United States Army), published by Whittlesey House, London (McGraw-Hill Book Company, Inc.).
3. The Effects of Atomic Weapons, prepared for and in co-operation with the U. S. Department of Defense and the U. S. Atomic Energy Commission—under the direction of the Los Alamos Scientific Laboratory, New Mexico—published by the Superintendent of Documents, U. S. Government Printing Office ($1.25 per copy).
4. United States Civil Defense, published by the National Security Resources Board and printed by the United States Government Printing Office.
5. Nuclear Science Abstracts—from the United States Atomic Energy Commission, Vol. 4, No. 17-18 (September 15 and September 30, 1950).
6. Lecture Series in Nuclear Psychics—published by the United States Government Printing Office, Washington, D. C.

(Continued on Page 1344)

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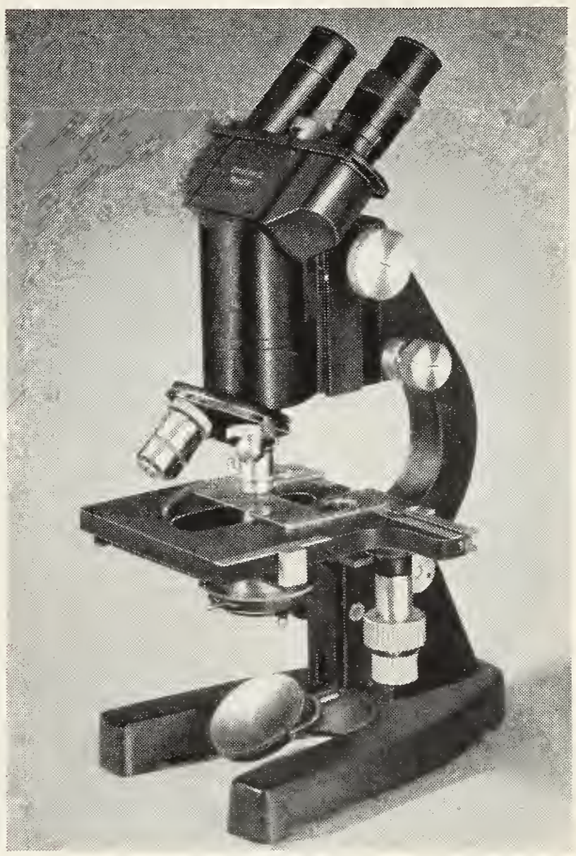

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(Continued from Page 1342)

7. List of film available through the Motion Picture Library—including those on atomic energy—American Medical Association, 535 N. Dearborn, Chicago 10, Ill.

* * *

D. H. Kaump, M.D., Detroit, was appointed by the Governor to the Technical Committee on Health and Medical Matters in Civilian Defense, upon the recommendation of MSMS President C. E. Umphrey, M.D. **L. Fernald Foster, M.D.,** Bay City, MSMS Secretary, spoke to the Bay City Kiwanis Club on September 14. His subject was "Compulsory Health Insurance"; he spoke to the Detroit Kiwanis on "American Medicine" on September 19; to the Grosse Pointe Rotary Club on "Medical Care—The American Way," September 18.

* * *

The 7th Councilor District, under the leadership of H. B. Zemmer, M.D., Lapeer, held a meeting in American Legion Hall, Lapeer, on October 31. An address on "Atomic Energy and its Relationship to Medicine" was given.

The program was arranged by the MSMS Committee on Atomic and Allied Procedures of which A. A. Humphrey, M.D., Battle Creek, is Chairman.

* * *

Public health service grants in the number of 155, totaling $4,708,766, recently were announced by Surgeon General Leonard A. Scheele, including the following in Michigan: University of Michigan, Ann Arbor—John D. Adcock, M.D., $9,396; John W. Bean, M.D., $3,000; William Dodd Robinson, M.D., $39,656; Raymond L. Garner, $4,104; H. Marvin Pollard, M.D., $1,100; Jerome W. Conn, M.D., $18,144; Felix G. Gustafson, $3,240; M. H. Seevers, M.D., $15,228. Wayne University, Detroit—Harry C. Saltzstein, M.D., and David J. Sandweiss, M.D., $11,138; Fred L. Rights, $3,800; W. W. Zuelzer, M.D., $7,000; F. Gaynor Evans, $6,100; Ernest D. Gardner, M.D., $12,000; and Walter H. Seegers, $12,862.

* * *

The 30th Annual Michigan Public Health Conference will be held at the Pantlind Hotel, Grand Rapids, November 29-30-December 1, 1950. General sessions will be held in the Black and Silver Ballroom of the Civic Auditorium under the Presidency of George C. Stucky, M.D., Charlotte.

Speakers include Michigan Health Commissioner A. E. Heustis, M.D., Lansing, Jerome Conn, M.D., Ann Arbor; F. S. Leeder, M.D., Lansing; Franklin H. Top, M.D., Minneapolis, and Haven Emerson, M.D., New York City.

Thursday, November 30, will be devoted to Section Meetings for Public Health Medical Directors, Dentists, Public Health Nurses, Engineers and Sanitarians, Nutritionists, Health Department clerical personnel and dental hygienists.

Friday, December 1, will be devoted to a seminar on "Meeting Health Problems in Disaster."

All members of the Michigan State Medical Society are cordially invited to attend. For detailed program write Dr. Stucky at Eaton County Health Department, Charlotte.

J. S. DeTar, M.D., Milan, a member of The Council of the Michigan State Medical Society, addressed the B'nai Brith Lodge in Congregation B'nai Israel Auditorium, Pontiac, on October 8, at a public meeting on "The Medical Profession's Answer to Socialized Medicine." Dr. DeTar was introduced by O. O. Beck, M.D., Birmingham, President Elect of the Michigan State Medical Society.

* * *

O. A. Brines, M.D., Detroit, has been named Chief Consulting Pathologist to the Veterans Administration. As such, Dr. Brines becomes a member of a twenty-four member national board representative of every branch of medicine, which board is the highest medical advisory board to the Veterans Administration. James H. Maxwell, M.D., of Ann Arbor is the other board member from Michigan.

* * *

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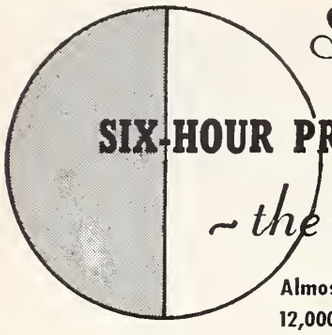

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THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

AN ATLAS OF HUMAN ANATOMY. By Barry J. Anson, Ph.D., Professor of Anatomy, Northwestern University Medical School. Philadelphia: W. B. Saunders Co. Price $11.50.

Dr. Anson has given us a completely new book, based on new dissections and covering the whole body. These are made with especial reference to a teaching value, but the use by the surgeon is prominently kept in mind. We have never seen more clear or useful illustrations. They are profuse, every vein, nerve, artery, bone, muscle or other structure is plainly marked, with a lead line, and the name is in Latin, so any student will be able to use the book even if he should not be able to read English. This is an Atlas, not a textbook with all the details and fine print. The pictures are large, easily seen and studied, and would make an excellent surgical reference book. No surgical operations are given, but some dissections and parts are turned back to give a better view of structure and relations. We like the book immensely.

THE ANTIHISTAMINES. Their Clinical Application. By Samuel M. Feinberg, M.D., Associate Professor of Medicine, Chief of Division of Allergy and Director of Allergy Research Laboratory; Saul Malkiel, Ph.D., M.D., Assistant Professor of Medicine, Director of Research Allergy Research Laboratory; Alan R. Feinberg, M.D., Clinical Assistant in Medicine, Attending Physician in Allergy Clinic. Northwestern University Medical School. Chicago: Year Book Publishers, Inc. Price $4.00.

The universal use of antihistamines for colds and allergies makes this book especially timely. The structure and formation of these drugs is given in the chapter on chemistry. Later most of the antihistamines on the market are described and their action stated, with studies of the percentage and type of side reactions. There is a real need for a book of this type which can be used as a ready reference.

INFECTION AND SEPSIS IN INDUSTRIAL WOUNDS OF THE HAND. A Bacteriological Study of Aetiology and Prophylaxis. By R. E. O. Williams and A. A. Miles (assisted by Barbara Clayton-Cooper and Brenda Moss). Privy Council Medical Research Council Special Report Series No. 266. London: His Majesty's Stationery Office, 1949. Price is 6d. Net.

This is a small paper-bound volume giving the results of a very thorough study of wound infection, chiefly as it applies to industry. The general conclusion appears to be that most of the infections are due to pre-existing organisms on the skin, and that the most frequent offender is staphylococcus aureus. Treatment and prophylaxis are discussed. The brochure is not quite current, as far as antibiotic therapy is concerned.—A.A.H.

DOCTOR COME QUICKLY. By Frank J. Clancy, M.D. Seattle: Superior Publishing Company, 1950. Price $2.95.

The author is a practicing physician in Seattle and has told his own story very interestingly and quite fully. He tells of his efforts to get into medical school, his trials, his graduation and of the especially difficult time getting started in practice during the years when a practice was not waiting for the young man to hang out his shingle, but when he had to struggle for every patient, and how he was glad to take the destitute, the surplus from other doctors, and the intense competition between doctors. He

tells very interestingly of the interesting cases he and a friend worked up, of his learning the hard way to examine a bladder by the cystoscope, and of his finally gaining recognition by careful and persistent work. He followed the trend of the times and made a trip to Vienna where he attended lectures. He tells of the AMA of Vienna, and its method of assigning patients and students to certain clinics or teachers. A very entertaining personal history.

THE TRUTH ABOUT YOUR EYES. By Derrick Vail, M.D. New York: Farrar, Strauss and Company, 1950. Price $2.50.

Many times the ophthalmologist has a patient with a particularly distressing more or less chronic condition which he describes and explains, repeatedly, only to have to repeat frequently. Dr. Vail has prepared a little book for the layman telling about the eye and its more prominent diseases or disabilities in terms the layman can understand. Dr. Vail is abundantly prepared and able to offer this book, and we believe it will be freely used as an adjunct to treatment. The book gives especially valuable chapters on glaucoma, cataract, refraction, muscle disturbances, injuries and eye hygiene. Well done.

SIGNIFICANCE OF THE BODY FLUIDS IN CLINICAL MEDICINE. By L. H. Newburgh, M.D., Professor of Clinical Investigation, University of Michigan Medical School, Ann Arbor, Michigan. Assisted by Alexander Leaf, M.D., Instructor in Internal Medicine, University of Michigan Medical School, Ann Arbor, Michigan. Springfield: Charles J. Thomas Publisher. Price $2.00.

The authors are Michigan men who were asked to give a series of lectures in Portland, Oregon, as the "Ernest A. Sommer Memorial Lectures," to cover some advance in physiology or pathology. This book on the body fluids was the result. The physiology of the body fluids is given, their composition, the elements which make up their structure, their atomic or molecular structure and weights, and their functions are carefully and clearly stated in a manner understandable by the medical practitioner. About sixty per cent of the book is devoted to the clinical significance of these fluids, their variations, and application of our knowledge of them. This is a very useful book, bound in a black semi-stiff cover, well printed in very legible type.

HARVARD SCHOOL OF PUBLIC HEALTH. Annual Report of the Dean, 1948-49. Cambridge: Published by the University, 1950.

This is quite a complete report of the work of the school, showing progress in teaching public health. A historical sketch is followed by the listing of the staff, discussions of the teaching problems and fields, and a fairly complete outline of the work done during the year.

VOCATIONAL REHABILITATION OF PSYCHIATRIC PATIENTS. By Thomas A. C. Rennie, M.D., Cornell University Medical College and the New York Hospital; Temple Burling, M.D., and Luther E. Woodward, Ph.D., Division of Rehabilitation, The National Committee for Mental Hygiene. New York: The Commonwealth Fund, 1950. Price $0.75.

The patient who has been given full advantages of rehabilitation treatment still has a problem all too frequently neglected. He has no job awaiting, and no experience in getting a job. This feature of the problem is considered in the first chapter. Surveys of convalescent patients in Traverse City State Hospital, Pontiac State Hospital, Ypsilanti State Hospital and Wayne County Hos-

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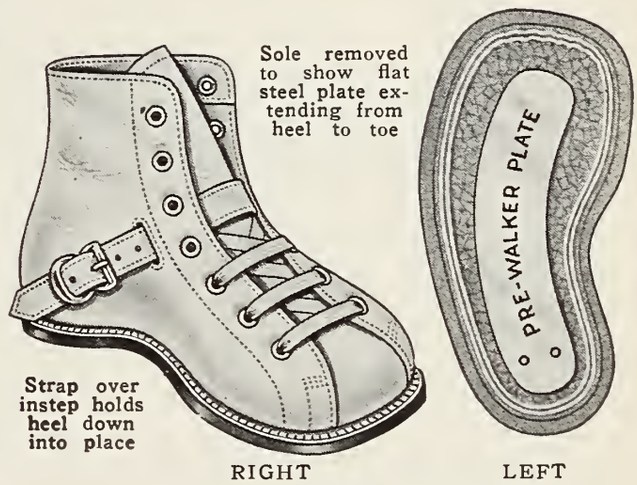

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Surgical Anatomy and Clinical Surgery, two weeks, starting November 20, February 19.
Surgery of Colon and Rectum, one week, starting November 27.
Gall-Bladder Surgery, ten hours, starting April 23.

GYNECOLOGY—Intensive Course, two weeks, starting February 19.
Vaginal Approach to Pelvic Surgery, one week, starting March 5.

OBSTETRICS—Intensive Course, two weeks, starting March 5.

RADIATION PHYSICS—Intensive Review Course, four days, starting November 29.

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pital give interesting facts. Comparison of rehabilitation work done in Connecticut, New York and Michigan on Psychosis, Psychoneurosis, Psychotic personality, Mental Deficiency, Epilepsy, Nervousness and other mental and nervous diseases for 1947 and 1948 totaled more for Michigan than for both of the other states. There are chapters on job finding and placement, adaptation of rehabilitation to rural areas, with considerable case work problems. A paper-covered handbook.

SURGERY OF CATARACT. By Daniel B. Kirby, A.M., M.D., LL.D. Professor of Ophthalmology (former Chairman of the Department), College of Medicine, New York. University; Attending Surgeon (former Director), Department of Ophthalmology, Bellevue Hospital; Surgeon, New York Eye & Ear Infirmary; Consulting Ophthalmic Surgeon, Manhattan Eye, Ear & Throat Hospital, St. Clare's Hospital, Department of Ophthalmology, and New Rochelle Hospital, Department of Ophthalmology; Former Associate in Ophthalmology, College of Physicians and Surgeons, Columbia University; Former Attending Surgeon, Institute of Ophthalmology, Presbyterian Hospital in the City of New York; and Fellow, the American College of Surgeons and The Pan-American Association of Ophthalmology. 339 Illustrations, including 52 subjects on 21 Color Plates. Philadelphia: J. B. Lippencott Co. Price $30.00.

Dr. Kirby and the publishers of this book have produced one of the finest examples of the printer's art, together with a most complete and satisfying text on the surgery of cataract. The history of the condition and its treatment during the ages, with the development of the various forms of cataract operation is beautifully done. Anatomy, physiology, development of the disease of cataract are all fully given, the brief but complete descriptions of the operations of the masters who have given us the profession of ophthalmology, a profusion of illustrations, Dr. Kirby says that now when we know so much about how to operate with but very little danger, and can make a complete extraction within the capsule, there is no need for patients to have a long period of near blindness. Soon after the eye has passed its useful stage it may be operated, and the sum total of results is really remarkably good. Most patients get excellent results and those who do not are so pleased with what they have received that they are happy. The book is especially timely in its discussions of complications. The active ophthalmologist cannot afford not to have it.

SURGICAL NURSING. By Eldridge L. Eliason, A.B., M.D., Sc.D., F.A.C.S. Emeritus John Rhea Barton, Professor of Surgery, University of Pennsylvania School of Medicine; Emeritus Professor of Surgery, University of Pennsylvania Graduate School of Medicine; Consulting Surgeon, Hospital of the University of Pennsylvania, Presbyterian and Philadelphia General Hospital. L. Kraeer Ferguson, A.B., M.D., F.A.C.S. Professor of Surgery, Graduate School of Medicine of the University of Pennsylvania and Woman's Medical College of Pennsylvania; Surgeon, Graduate Hospital of the University of Pennsylvania, Hospital of the Woman's Medical College of Pennsylvania, Philadelphia General Hospital and Doctors Hospital; Consulting Surgeon, Frankford Hospital and U. S. Naval Hospital, Philadelphia; Lillian A Sholtis, R.N., B.S., M.S., Assistant Professor of Surgical Nursing, Yale University School of Nursing; formerly Supervisor of Operating Rooms, Hospital of the University of Pennsylvania. Ninth Edition Revised and Reset, 336 Illustrations, Including 9 Subjects in Full Color. Philadelphia: J. B. Lippincott Co., Price $4.00.

A good work to supply training for the surgical nursing field. We commend it.

THE MERCK MANUAL OF DIAGNOSIS AND THERAPY. A Source of Ready Reference for the Physician. Eighth Edition. Rahway, N. J.: Merck & Co., Inc. 1950. Price $4.50; Thumb Index, $5.00.

The eighth edition of Merck's Manual is now available, and for a pocket size book it is a major accomplishment. Well printed on nontransparent paper, it contains almost 1,600 pages of concise, classified information. Part I, diseases and major symptoms, covers 338

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THE GENEALOGY OF GYNAECOLOGY. History of the Development of Gynaecology throughout the Ages. 2000 B.C.—188 A.D. With Excerpts from the Many Authors who have Contributed to the Various Phases of the Subject. By James V. Ricci, A.B., M.D. Clinical Professor of Gynaecology and Obstetrics, New York Medical College; Director of Gynaecology, City Hospital, New York; Attending Gynaecologist and Obstetrician, Flower and Fifth Avenue Hospitals; Consultant in Gynaecology and Obstetrics, Beekman-Downtown Hospital; Consultant in Gynaecology and Obstetrics, Columbus Hospital; Fellow of the New York Academy of Medicine; Honorary Member of the Italian Society of Medical History and the Natural Sciences. Department of Gynaecology and Obstetrics New York Medical College City Hospital Division. Second edition, enlarged and revised. Philadelphia: The Blakiston Co., 1950. Price $8.50.

A second edition of this valuable historial volume gives the author opportunity to revise and re-evaluate his material and to add much that has been developed by later research.

The well-informed gynecologist should be well served by this volume as a review and a stimulus to greater effort. Any research library or historical collector needs it.

TAX DOLLARS

A lot of people—since the Korean War started—have been wondering aloud about where their tax dollars have been going. A recent issue of *Barron's,* a financial weekly, carried an article that says the United States pays 100,000 employes more than $270 million a year just to store and issue supplies. *Barron's* finds no particular fault with this, but appears to be somewhat concerned that one agency has on hand enough fluorescent bulbs to last 93 years! Another agency has enough ruled paper to last till the year 2118, and a third has enough loose leaf binders to get through the year 2197! And—no joke or pun intended—the Hoover Commission found many agencies had a fifty-year supply of red tape.

GROWTH THROUGH CO-OPERATION

(Continued from Page 1320)

health organizations and the people of the state of Michigan.

While the Council is designed and operated as a fast-moving vehicle, it still remains sufficiently flexible to meet current demands, for example, in its participation in the Michigan Civil Defense program and in the dissemination of authentic information from the newly created committee on Atomic and Allied Procedures of the Michigan State Medical Society.

Within a period of 18 months, the idea which the Michigan State Medical Society germinated has been transformed into an aggressive, positive, vigorous program the blueprints of which have been sought by 22 states: the structure and activity of the Michigan Health Council have been cited by the American Medical Association and the National Health Council.

New horizons have been sighted and an indelible trail has been left behind by the aggressive, expanded activities program of the Michigan Health Council—a trail which has brought recognition to the Michigan State Medical Society and the other organizations which launched the Council on its expanded program in February, 1949.

But the job is not finished. The Michigan Health Council holds fast to the philosophy expanded upon in Community Health Council organizational meetings—"the pursuit of good health is a continuing program."

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MILITARY MEDICINE

Who Is In the Reserves?

(Continued from Page 1260)

and the Bureau of Naval Personnel have supplied the following information, which should be considered only for guidance, not for determination of status:

Army:

"Reserve officer appointments or reappointments in force at the outbreak of World War II (or made subsequently) remain in force until six months after termination of the war or termination of the five-year appointment period, whichever is the later, unless specific action to terminate the appointment has been taken by the Department of the Army. Under current law in this instance, World War II has not been declared terminated."

Navy:

"A man is still in the Naval reserves unless: (1) he has resigned his reserve commission, or (2) he has been discharged from the reserves. The mere release to inactive duty of an officer in the Naval Reserves does not sever his connection with the Navy."

Air Force had no separate medical service during World War II. The Air Surgeon's office said that its situation would be covered by the above Army statement.

We repeat, the proper course is for every man uncertain of his reserve status to contact his Military District commanding officer or Naval District commandant.

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THE JOURNAL
of the Michigan State Medical Society

VOLUME 49 DECEMBER, 1950 NUMBER 12

Contributors to this Issue

GORDON B. MYERS

IVAN F. DUFF

F. JANNEY SMITH

PAUL S. BARKER

L. F. FOSTER

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L. G. Christian, M.D., Lansing.....1951
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W. D. Barrett, M.D., Chairman, Detroit 1952
W. H. Huron, M.D., Iron Mountain..1952
R. L. Novy, M.D., Detroit.....1952

Alternates
H. H. Cummings, M.D., Ann Arbor..1951
E. C. Texter, M.D., Detroit.....1951
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1. Bauer, G.: Angiology 1: 161-169 (Apr.) 1950.
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MEDICAL MEETINGS AND CLINIC DAYS

A list of known medical meetings and clinic days, sponsored by county medical societies and other physicians' groups in Michigan, follows:

January 31	Mt. Carmel Mercy Hospital Clinic Day	Detroit
February 8	Jackson County Medical Society's Clinic Day	Jackson
March 14-15-16	MICHIGAN POSTGRADUATE CLINICAL INSTITUTE	Detroit
March 17	SECOND ANNUAL MICHIGAN HEART DAY	Detroit
Spring	MSMS Postgraduate Extramural Courses	State-wide
April 3	Calhoun County Medical Society's Clinic Day	Battle Creek
April 4	SECOND MICHIGAN INDUSTRIAL HEALTH DAY	Detroit
April 18	Genesee County Medical Society's Cancer Day	Flint
April	Highland Park Physicians Club Clinic	Highland Park
May 3	Ingham County Medical Society's Clinic Day	Lansing
May 9	Wayne University College of Medicine Alumni Association Clinic Day and Reunion	Detroit
May 22	Bon Secours Hospital Clinic Day	Grosse Pointe
June	St. Clair County Medical Society's Clinic Day	St. Clair
June	Upper Peninsula Medical Society Annual Meeting	
July 26-27	Annual Coller-Penberthy Medical-Surgical Conference (sponsored by Grand Traverse - Leelanau - Benzie County Medical Society)	Traverse City
Sept. 26-27-28	MICHIGAN STATE MEDICAL SOCIETY ANNUAL SESSION	Grand Rapids
October 13	Third Michigan Cancer Conference	East Lansing
Autumn	MSMS Postgraduate Extramural Courses	State-wide
Oct. or Nov.	American Academy of General Practice of Wayne County	Detroit
November 7	Clara Elizabeth Fund Lectures (sponsored by Genesee County Medical Society and the Clara Elizabeth Fund for Maternal Health)	Flint

Additions to this list of meetings are invited by the Editor of JMSMS, in order to make this monthly announcement complete and accurate.

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of October 19, 1950

- At this meeting, held in Lansing, seventy-five separate items were presented, discussed, and acted upon by the Executive Committee of The Council which was in session from 10:45 a.m. to 10:00 p.m. The highlights were as follows:
- Monthly financial reports, including break-down of the Public Education Account and of the Public Education Reserve Account, were presented, studied in detail, and approved.
- Bills payable for the current month were presented, approved, and payment was authorized.
- Invitational membership campaign. As a means of offsetting a drop in the active membership due to hundreds of transfers in 1951 to Military Membership, the Executive Committee authorizes the institution of an invitational membership drive by MSMS and county medical societies and the reprinting of the leaflet "Benefits of the Membership in Medical Societies" for use in this campaign.
- Matters referred to The Council by the 1950 House of Delegates: (a) Report was given that the attempt to bargain away medical services —made by two large employers—had been invited to the attention of the membership, and further contacts with employers' associations were authorized; (b) Committee of Seven to Study Basic Science Law. The President announced this Committee: J. D. Miller, M.D., Chairman, Grand Rapids, W. B. Harm, M.D., Detroit, Mr. J. Joseph Herbert, Manistique, J. E. Livesay, M.D., Flint, J. H. Schlemer, M.D., Detroit, E. D. Spalding, M.D., Detroit, and D. B. Wiley, M.D., Utica; (c) Study of Nursing Needs. This resolution was referred to the Permanent Conference Committee for advice and report back to The Council; (d) Development of simplified insurance reporting forms. Information on the work done on this subject by the AMA and by other state medical societies is to be obtained with report back to The Council at the earliest possible date; (e) Change in the Coroner system. This was referred to the

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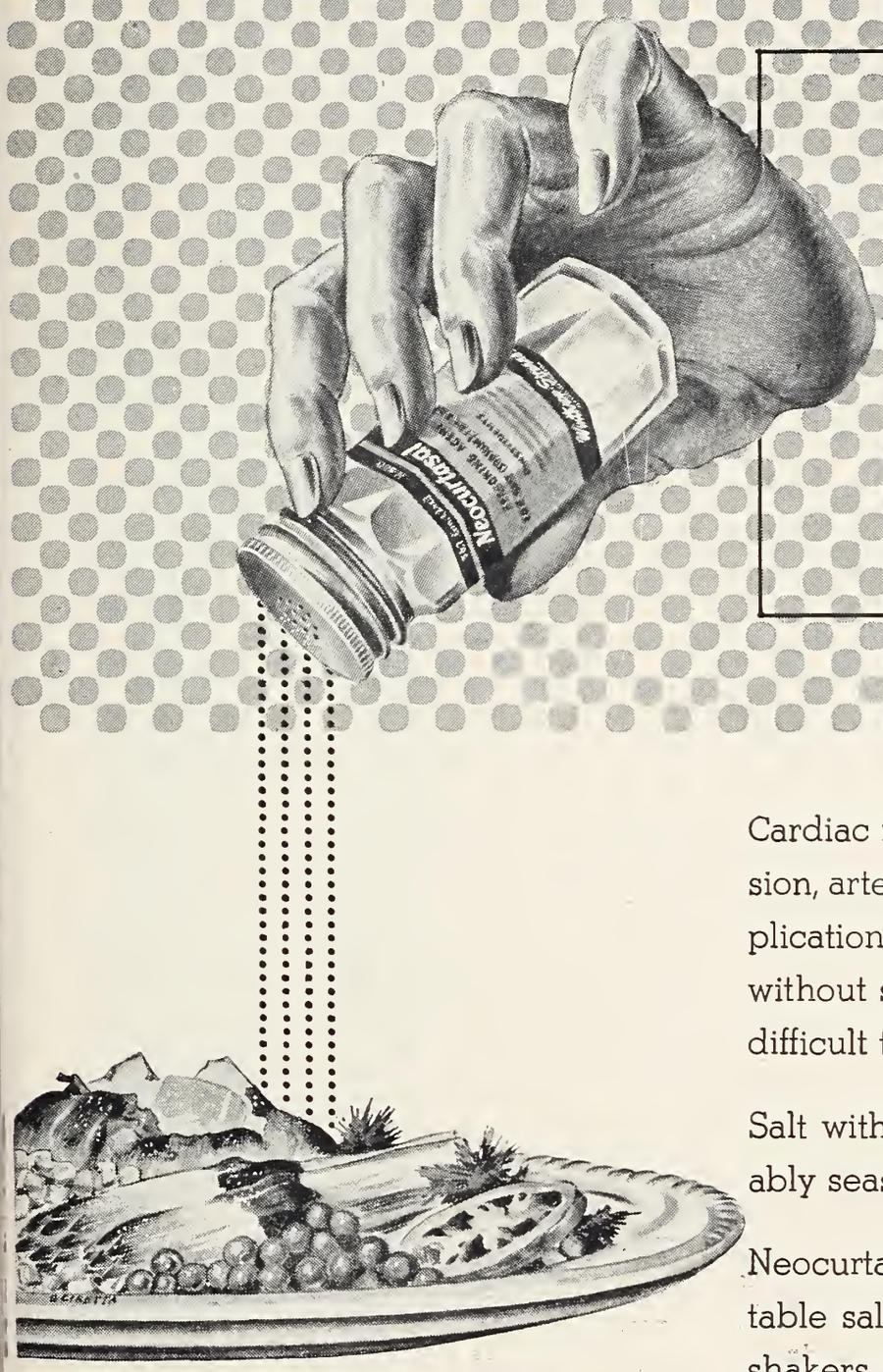

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HIGHLIGHTS OF THE COUNCIL

(Continued from Page 1362)

MSMS Legislative Committee for study and report back to The Council. Other matters referred by the House of Delegates were delegated to the MSMS Executive Director or to the Public Relations Department for execution.

- Rheumatic Fever Centers—exempt from income tax. A communication dated October 3, 1950 from the Office of Commissioner of Internal Revenue, U. S. Treasury Department, declared that the Michigan Rheumatic Fever Control Centers are entitled to exemption from federal income tax under the provisions of Section 101 (7) of the Internal Revenue Code, because the Rheumatic Fever Control Centers are a committee activity of the Michigan State Medical Society which was ruled exempt under this Section on May 22, 1944.
- Hospital standardization. The announcement from the American College of Surgeons that it was relinquishing its hospital standardization program was reported and thoroughly discussed. The Executive Committee of The Council instructed that notification be sent to ACS, AMA, and other interested organizations protesting against this relinquishment by the ACS of its hospital standardization program and encouraging its transfer to the American Medical Association.
- A request from the Director of the Social Security Department of the UAW-CIO for a meeting with a committee of the Michigan State Medical Society to study the medical and health aspects of life pensions to persons who become permanently and totally disabled, was presented and a study committee to explore and to report back to The Council was appointed: O. O. Beck, M.D., Chairman, Birmingham, William Bromme, M.D., Detroit, D. H. Kaump, M.D., Detroit, J. E. Livesay, M.D., Flint and C. W. Brainard, M. D., Battle Creek.
- *Detroit Times* editorial. A letter of commendation to the *Detroit Times* on the excellence of an editorial "Fighting for Her Life," published October 19, 1950, was authorized.
- Average age of members of The Council. The Secretary reported that the average age of council members at this time is 54.9 years.
- White House Conference, Washington, D. C., December 3 to 7. Frank Van Schoick, M.D., Jackson, and H. B. Zemmer, M.D., Lapeer, were authorized to attend this Conference as MSMS representatives.
- 1954 MSMS Annual Session in Detroit. The dates of this meeting were set as September 29-30, and October 1, 1954.
- Doctors of medicine to stagger half-holidays. The Executive Committee of The Council discussed the problem of lack of medical service at all times and instructed that all efforts be made to solve same through immediate contacts to be made by MSMS Councilors and county medical society officers with publicity to their membership, especially urging that doctors stagger their half-holidays.
- Change in MSMS By-Laws re-election of Alternate Delegates. This subject was referred to the Committee on Constitution and By-Laws.
- J. A. Witter, M.D., Detroit, was appointed MSMS representative to the Legislative Committee of the Michigan Nursing Center Association.
- Legal Counsel J. Joseph Herbert invited attention to the recent decision of Judge Claude McColloch, U. S. District Court, Portland, Oregon, throwing out the Government's case against the Oregon State Medical Society et al. He also presented opinion on the sixty-day billing clause of the Michigan crippled Children Commission (which is covered by law, not by MCCC rule).
- Mr. Herbert was authorized to develop an opinion on the subject of hospital records and authorization to attorneys to study same, with or without the patient's, the doctor's, and the hospital's consents.
- The Public Relations Counsel advised that 1,469 column inches of space had been devoted in newspapers to the 1950 MSMS Annual Session; a total of 14 talks were presented over the radio, television and before luncheon clubs during the three days of the Annual Session in Detroit.
- A letter of commendation to Robert Goldman of the *Detroit Free Press* was authorized. Mr. Goldman, Ace science writer and contributor of much accurate information to the public on medical matters, is leaving the *Detroit Free Press* for private business.
- Mr. Brenneman reported that the MSMS motion picture "To Your Health" has been shown in

(Continued on Page 1366)

in active rheumatoid arthritis, the "best agent . . . that is readily available."[1]

Many therapeutic agents have been advocated for the treatment of active rheumatoid arthritis, with varying degrees of success. Among those now generally available, gold is "the only single form of therapy which will give significant improvement."[2]

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BIBLIOGRAPHY (1) Holbrook, W. P.: New York Med. (no. 7) 4:17, 1948. (2) Ragan, C., and Boots, R. H.: New York Med. (no. 7) 2:21, 1946. (3) Rawls, W. B.; Gruskin, B. J.; Ressa, A. A.; Dworzan, H. J.; and Schreiber, D.: Am. J. M. Sc. 207:528, 1944.

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HIGHLIGHTS OF THE COUNCIL

(Continued from Page 1364)

192 Michigan theaters and "Lucky Junior" has appeared in 239 Michigan theaters.

- Committees of The Council for 1950-51, as appointed by Chairman R. J. Hubbell, M.D., were presented to and approved by the Executive Committee of The Council (list to be published quarterly in JMSMS).
- The following committee reports were given consideration: (a) Special Committee on Education, meeting of October 17; (b) Mental Hygiene Committee, meeting of September 27; (c) Mediation Committee, meeting of September 20; (d) Committee of Ophthalmologists, meeting of September 20; (e) Health Survey Advisory Committee, meeting of October 4; (f) Medical Procurement Advisory Committee, meeting of September 27.

1951 MSMS DUES SET AT $45.00

The House of Delegates of the Michigan State Medical Society, at its Detroit session of September 18-19, 1950, set the MSMS dues for the year 1951 at $45.00. At the same time, the House of Delegates eliminated the $25.00 assessment which had been levied on every MSMS member for some years in the past.

The 1951 dues represents a net increase of $8.00 over the former $12.00 dues plus the $25.00 assessment.

E. A. Osius, M.D., Detroit, Chairman of the MSMS Finance Committee, explained to the House of Delegates that the $12.00 dues had not met the expenses of the General Fund of the State Society for the years 1948, 1949 and 1950. In fact, The Council had found it necessary to allocate $5.00 of the Educational Fund ($25.00 assessment) to the General Fund in the year 1950 in order to meet current expenses. Dr. Osius stated that the $8.00 increase was necessary to offset higher office and routine operating expenses of the General Fund caused by decreased purchasing power of the dollar; in addition it would tend to offset loss of revenue due to many Active Members being transferred to Military Membership, a non-dues paying classification.

A continuance of the progressive work of the Michigan State Medical Society, plus maintenance of the current high level of public relations activity, will be possible with the increase in dues, according to Dr. Osius, who reported that other outstanding state medical societies such as California, Colorado, Oregon, etc., have annual dues of $50.00 or more.

Dues in professional societies are deductible in income tax reports, while the charging off of assessments is debatable.

1951 MPCI FEATURES 34 STARS ON PROGRAM—MARCH 14-15-16

The Fifth Michigan Postgraduate Clinical Institute, to be held at the Book-Cadillac Hotel, Detroit, Wednesday, Thursday, Friday, March 14-15-16, 1951, will present the following speakers: Wesley W. Spink, M.D., Minneapolis; R. R. Grinker, M.D., Chicago; David A. Boyd, Jr., M.D., Rochester, Minnesota; Willard O. Thompson, M.D., Chicago; Willis E. Brown, M.D., Little Rock, Arkansas; Evarts A. Graham, M.D., St. Louis, Missouri; Stanley Gibson, M.D., Chicago; John E. Gordon, M.D., Boston; Russell S. Boles, M.D., Philadelphia; Allan C. Barnes, M.D., Columbus, Ohio; Francis D. Moore, M.D., Boston; Charles A. Ragan, Jr., M.D., New York City; W. Paul Holbrook, M.D., Tucson, Arizona; George Kamperman, M.D., Detroit; Clifford D. Benson, M.D., Detroit; Noyes L. Avery, Jr., M.D., Grand Rapids; Angus G. Goetz, M.D., Detroit; John M. Sheldon, M.D., Ann Arbor; Ivan F. Duff, M.D., Ann Arbor; J. Milton Robb, M.D., Detroit; Robert H. Denham, M.D., Grand Rapids; Osborne A. Brines, M.D., Detroit; Gordon B. Myers, M.D., Detroit; Lawrence Reynolds, M.D., Detroit; G. Thomas McKean, M.D., Detroit; Warren K. Wilner, Jr., M.D., Ann Arbor; Arthur C. Curtis, M.D., Ann Arbor; Albert D. Ruedemann, M.D., Detroit; A. J. French, M.D., Ann Arbor; Harold J. Kullman, M.D., Dearborn; Harry A. Towsley, M.D., Ann Arbor; Reed M. Nesbit, M.D., Ann Arbor; Frederick C. Swartz, M.D., Lansing; and Jerome W. Conn, M.D., Ann Arbor.

The detailed program of the Michigan Postgraduate Clinical Institute will be published in the January Number of JMSMS.

MICHIGAN HEART DAY, SATURDAY, MARCH 17, 1951

The Second Annual Michigan Heart Day, sponsored by the Michigan Heart Association, will hold the stage at the Grand Ballroom, Book-

(Continued on Page 1368)

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Hamblen, E. C.: North Carolina M. J. 7:533 (Oct.) 1946.

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*Perloff, W. H.: Am. J. Obst. & Gynec. 58:684 (Oct.) 1949.

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(Continued from Page 1372)

MSMS Public Relations Work Continues

Meanwhile the general public relations activity of the medical profession in Michigan continued. The "Tell Me, Doctor" program, nationally recognized as the only daily medical radio program in the United States, passed its 1,200th broadcast. The two motion pictures developed by the MSMS —"Lucky Junior" and "To Your Health" were exhibited in 241 and 210 theaters, respectively. Rights to the latter named picture were sold to seven other state medical societies in the United States for showing in theaters and loaned for showing to hundreds of small groups.

The Michigan Health Survey was completed and copies sent to 5,000 M.D.s in Michigan. A weekly twenty-minute television program, "It's Your Life" over WXYZ-TV and other television stations in Michigan was developed. Support was given the Michigan Health Council in its development of twenty-seven new Community Health Councils. A national conference on M.D.s participation in Health Councils was held in Detroit, October 1, jointly sponsored by the AMA and the MSMS. The Michigan Rural Health Conference was held at Michigan State College, East Lansing, powerfully backed by the MSMS. Resolutions opposing socialized medicine to a total of 331 were reported to the MSMS Executive Office. Outstanding publicity was obtained in connection with the MSMS Annual Session and the Michigan Postgraduate Clinical Institute. During the 1950 Annual Session, in addition to hundreds of inches of newspaper space, 14 presentations were made over radio and television and before service clubs in the Wayne County area.

Recognition in national lay publications of the United States has been given the MSMS public relations program as well as in the professional public relations journals.

Too often but a few persons are credited with the success of a program such as that outlined above. Although there are a few persons under whose direction the program is carried out, yet the extent and success of the entire effort is due to the unswerving devotion of the entire membership of the MSMS to the principles that have made American Medicine great. From this devotion has come a united effort, only partially reflected in the statistics above, that will keep America great—and free.

Where Do We Go From Here?

No question remains about the victory gained against socialism in the last election. It was definite if not complete. Across the country many of those whose names were closely linked with socialistic-sided legislation were removed from office.

But certains things were obvious. These were:

That the proponents of socialism in America are prepared and committed to continue their efforts and that huge resources to influence public opinion are at their command;

That, upon the progress made in the next eighteen months, by either side, depends the fate of America; and that only if we falter and stumble in our new found strength will those who gave their time during this past year be betrayed.

Where do we go from here? That's up to you!

AVERAGE AGE OF COUNCILORS

The average age of members of The Council of the Michigan State Medical Society, 1950-51, is surprisingly low. A recent survey indicates that the average age of the members of the MSMS "board of directors" is only 54.9 years.

The youngest Councilor is aged forty-one and the eldest is sixty-nine.

Five Councilors are in their forties; twelve are in their fifties; and six are in their sixties.

SQUIBB ABSTRACT BULLETIN

The *Squibb Abstract Bulletin* is now available to individuals and institutions on a subscription basis at $25 a year, it has been announced by Dr. Geoffrey Rake, director of The Squibb Institute for Medical Research and medical director of E. R. Squibb & Sons.

The *Bulletin,* now in its twenty-third year of publication, is issued weekly. Abstracts of articles from approximately 500 American and European journals in the fields of medicine, pharmacology, chemistry and biochemistry are included. Each weekly issue contains nearly 100 abstracts, and each gives some 115 title listings of additional papers sometimes with a brief indication of the contents. The abstracts represent those papers which are considered to be most important. An annual author index is published and each issue gives subject headings with individual entries.

Abstracting is unusually prompt; the bulk of the material appears in the *Bulletin* within three weeks after receipt of the journals in the Squibb library.

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WHEN OBESITY IS A PROBLEM

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Opinion on Oregon Physicians' Service

UNITED STATES DISTRICT COURT
DISTRICT OF OREGON

UNITED STATES OF AMERICA
Plaintiff

vs.

OREGON STATE MEDICAL SOCIETY et al
Defendants

OPINION, FINDINGS AND NOTES
OF THE TRIAL JUDGE

The trial judge states: The government contends (1) that defendants, beginning about 1936, conspired to restrain and monopolize prepaid medical care "in the State of Oregon"; (2) that "each of the medical societies" (Oregon State Medical Society and eight county and regional societies) "attempted to restrain and monopolize prepaid medical business in areas where they operate"; and (3) that "each of the medical societies (Oregon State Medical Society and eight county and regional societies) did restrain and monopolize prepaid medical business in areas where they operate."

I hold that none of the Government's charges have been proven by a preponderance of the evidence.

I hold that *Oregon Physicians' Service* is not a conspiracy but, rather, an entirely legal and legitimate effort by the profession to meet the demands of the times for broadened medical and hospital service, eliminating the evils of privately owned concerns as well as the element of private profit.

I will make a finding that the defendants did not conspire to restrain and monopolize prepaid medical care in the State of Oregon.

I will make a finding that defendant medical societies did not attempt to restrain and monopolize prepaid medical business in areas where they operate by express agreement or concert of action within their own groups or with third parties.

I will make a finding that defendant doctors and medical societies have not restrained or sought to restrain the use of hospital facilities by others, except in cases of lawful and legitimate professional discipline of individual doctors for unprofessional conduct detrimental to their patients, to the hospitals and to the public generally.

The Government says regardless of motive, if the necessary result of action is monopoly, the statute applies. But I find (1) that the motive (intent) of defendants was not to restrain or monopolize; and (2) that monopoly did not in fact result and does not exist. Nor does unreasonable restraint exist.

I will make a finding that if there was a conspiracy, as alleged by the Government, the thread was broken and the conspiracy ended when a large percentage of Oregon doctors entered the Armed Forces in the period 1941-1945.

I will make a finding that OPS and the doctor-owned county and regional plans are business competitors with the privately owned profit-making organizations and that, as competitors, the doctors have conducted their organizations fairly and well within the legal limitations of competitive business practice.

I will make a finding and/or conclusion that the practice of medicine is not a trade within the meaning of the Sherman Law.

I will make a finding that OPS and the various county or regional doctor-owned or doctor-sponsored prepaid medical plans were not formed to eliminate or restrain organizations already in the field; on the contrary, they were formed to meet the social need which had arisen for group medical care, eliminating the element of private profit, over and above legitimate hospital and medical charges.

I will make a finding and/or conclusion that defendants have not in recent times (if ever) boycotted privately owned hospital associations, and that they do not, so far as the evidence or legitimate inferences show, intend to boycott privately owned hospital associations in the future.

(The Judge calls the Government a liar. Page 455, Government's Brief, states a greater per cent of Oregon is covered by prepaid plans than in any other state. The Judge found only 120,000 out of 1,510,000 people in the state belong to OPS.)

The Government charges that OPS is engaged in a conspiracy to monopolize *statewide* prepaid medical care, but OPS is criticized because it does not go into certain counties.

(Continued on Page 1378)

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REFERENCES:

1. Gordon, E. S.: Nutritional and Vitamin Therapy in General Practice, Year Book Pub., 3rd ed., 1947. 2. Manchester, T. C.: Food Research, 7:394, 1942. 3. McLester, J. S.: Nutrition and Diet, Saunders. 4th ed., 1944. 4. Rose, M. S.: Rose's Foundation of Nutrition, rev. by MacLeod and Taylor, Macmillan, 4th ed., 1944. 5. Sherman, H. C.: Chemistry of Food and Nutrition, Macmillan, 7th ed., 1946.

FLORIDA
Oranges · Grapefruit
Tangerines

(Continued from Page 1376)

Fee Fixing

Of course, if the professions are trades, then fee schedules become (under Supreme Court decisions) *per se* unlawful.

The question of fee fixing has become academic in the present case because the case revolves around the legitimacy of the operations of the doctors in competition with the privately owned plans. The Government concedes the right of the doctors to compete in this field and the fixing of fees is of the very essence of all prepaid plans, whether doctor-owned or privately owned.

The Supreme Court has held that Organized Labor does not come under the anti-trust laws. This was court-made law.

Can it be justly contended that the Congress intended to include the professions when it enacted the Sherman Law in 1890? The American Medical Association had been in existence 43 years. The American Bar Association was organized in 1878.

The Age of the Common Man

In a measure, this case is an attack on the professions. Everything critical of the doctors that has been said in the case could be said of the legal profession.

The World Revolution that we hear about allows no place for the professions. All that is principle, dignity, the efforts of the ages to create an aristocracy of intellect—these are to be destroyed in the interest of "the common man."

He will be "common," indeed, without professions in the society which he is to rule.

Self-preservation

Leaders among the doctors maintain the view that doctor-owned prepaid medical plans are the profession's answer to socialism.

Can it be that a profession may not defend itself by reorganization of its methods, by doing within the profession what has been compelled elsewhere by law; that, thus, to reorganize and seek to preserve its independent status makes an organized profession and its leaders criminals and subject to the injunctive power of the courts?

In short, that organized medicine must remain a sitting duck while socialism overwhelms it? I would not expect an American court to hold that.

Socialized Medicine may overtake them but the doctors claim the right to save the profession from socialism. That is what this case is about, according to the doctors' viewpoint. As to this defense it must be conceded that the purpose with which action is taken is of prime importance under the Sherman Act.

What was the purpose of the doctors in organizing the Oregon Physicians' Service? Was it to obtain a monopoly in the prepaid medical field, or was it to save themselves and their profession from threatened socialization? I hold it was the latter and that nothing in the anti-trust laws deprives them of the right to fight to defend their independent professional status. *That is entirely different from whether socialization can be lawfully forced on them.* I might add that any other construction of the statute would raise the gravest questions.

I have great difficulty in following the Government's criticism of county and regional doctor groups who have set up their own local prepaid plans. They are but discharging their duty to their own local people, it seems to me.

Plaintiff's case was, at my request, argued fully at the end of the Government's testimony; and, having had the advantage of extensive pre-trial hearings and exhaustive briefs, I have not felt the need for further arguments.

Judgment of dismissal will at a later time be entered.

Dated at Portland, Oregon, this 28th day of September, 1950.

(Signed) CLAUDE MCCOLLOCH, *District Judge.*

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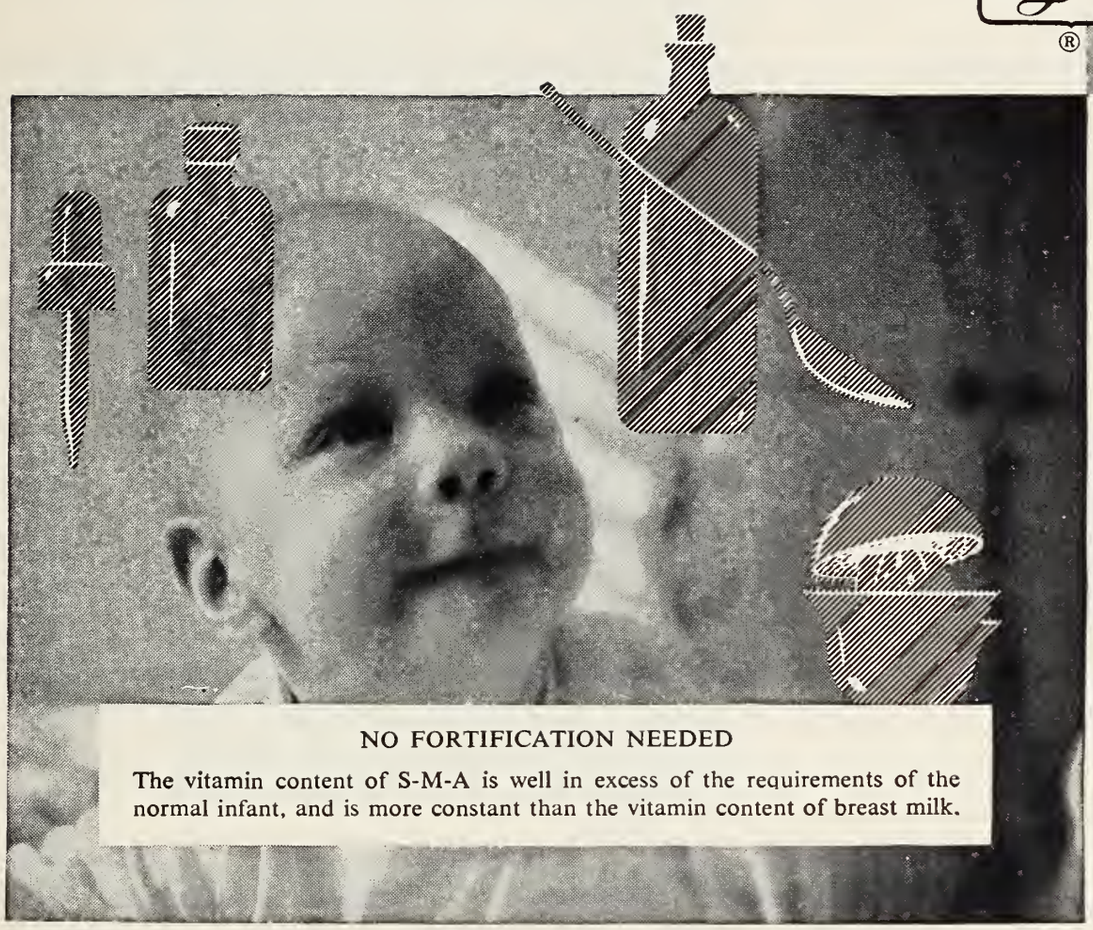

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Cancer Comment

SECOND MICHIGAN CANCER CONFERENCE

The Second Michigan Cancer Conference, held in Grand Rapids on October 18, 1950, drew an attendance of approximately 175 representatives of lay and professional organizations throughout Michigan. The Conference was sponsored by the Cancer Control Committee, Michigan State Medical Society, the Michigan Department of Health and the Michigan Division, American Cancer Society. Four papers were presented at the morning session, and a round-table discussion followed the luncheon.

A. E. Heustis, M.D., Commissioner of Health, reviewed the cancer problem in Michigan as it has developed over the years. There are still wide gaps in what we know about controlling cancer and what is being done in that field. Nothing can take the place of the careful physical examination as a case-finding procedure. New diagnostic tests have not yet been found reliable for general use.

Dr. Heustis stated that periodic physical examinations are helping to find more early cancer, as is the Hillsdale Plan, whereby every doctor's office is a detection center. This plan has been accepted, in principle, by about twenty Michigan counties and by an increasing number of state and local medical organizations throughout the country. He pleaded for acceptance of cancer reporting as an essential part of better cancer control, and for better local organization and co-ordination of cancer activities. Professional education is continuing through the bi-monthly distribution of the *Cancer Bulletin* to all physicians in the state. Increasing emphasis is being given to lay education, especially high school education.

Dr. Heustis paid a glowing and well-deserved tribute to the work of Dr. Norman F. Miller, chairman of the Cancer Control Committee, who resigned this year because of pressure of work in his new Maternity Unit in the University Hospital. Under Dr. Miller's leadership, Michigan has added another "first"—the Hillsdale Plan for routine examinations of easily accessible sites of cancer in patients willing to have the check-up, the examination being made in the office of the patient's own physician and at a nominal expense. The percentage of positive findings of unsuspected, early and *therefore curable* cancers has brought national acclaim of this very simple procedure.

C. D. Selby, M.D., lecturer on industrial health, School of Public Health, University of Michigan, in discussing industrial physical examinations as cancer case-finding procedures, said that because of the fine relationship existing between the industrial physician and employes many opportunities arose for finding cancer in early and curable stages. The time element in pre-employment examinations precludes cancer studies, but the frequent contacts with employes give many opportunities for examination, education and reference to family physicians for conditions—including cancer—that have no relation to the employment. Employe magazines are good educational media. The physical examination of executives now required in many industries offers additional opportunity for cancer case finding.

J. R. Heller, M.D., director, National Cancer Institute, Bethesda, Maryland, discussed progress in cancer research. He pointed out that from the many research programs now under way, many encouraging facts were developing. Research is being increasingly focused on the cell, especially its biochemistry. There are important chemical differences between normal and cancer tissue, especially in their enzyme content and use of carbohydrates.

Dr. Heller described a new technique for study of single cells in capillary tubes by means of the electronic microscope. Such control enables the effect of drugs on single cells to be observed and promises to aid materially in the studies on cell metabolism.

Adequate quantities of cancer tissue are now available from known genetic sources so that extensive laboratory studies can be carried out on the destructive action of many chemicals on cancer cells. None of the new therapeutic measures can yet replace surgery, x-rays and radium; and no new diagnostic agent can offer as much protection to the patient as careful physical examination, supplemented by biopsy when indicated. Some of these

(Continued on Page 1394)

"Stick-to-it-iveness is fine— for everyone else...

"but take me—I just can't stick to my diet. I can't resist desserts. Oh, dear, this diet is getting me down!"

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Editorial Comment

PAY MORE, GET LESS

A pamphlet about President Truman's national health plan is now being distributed by the Democratic National Committee. It is attractively printed and undoubtedly rather expensive for nationwide distribution. The committee, however, probably figures the title "Better Medical Care Than You Can Afford" has vote-getting appeal.

All in all, it is an argument for compulsory health insurance on a national scale. There are few readers who are not familiar with the arguments for and against the program. To this date the American people and Congress have been far more impressed by the cons than the pros.

As usually is the case with Administration propaganda, there is a large measure of misinformation and misleading statements. For instance, try to logically explain the possibility of "better medical care than you can afford" with a program of "more medical education, more medical research, more hospitals and health centers, more local public health work and more health protection for babies and children."

These worthy objectives have been and are being met by the medical profession. And they can be attained in the future, if the experience in other countries is any criterion, on a far better scale at lower cost by the medical profession as it is now constituted, rather than under a program of socialized medicine which, by its very nature, would place doctor and patient alike under the thumb of a colossal and ever-expanding Federal bureau.

The cost of medical care and treatment under Federal health insurance could not be measured by the size of the doctor's bill or the hospital statement. The real cost would be hidden in general Federal taxation. Every family would pay far more for medical protection and, at the same time, be wound up in an inevitable amount of Government red tape.

Those who actually believe national compulsory health insurance would result in better protection at less cost somehow feel they will not be called upon to pay their share of a multibillion Federal program. They can't escape. They will be called upon to pay, one way or another.

It is no secret that millions under the national life insurance have been paid out of the Federal Treasury. This was not the original intention of Congress, but it has been and is being done. As a result refund dividends have been paid to policy holders.

Veterans and non-veterans alike know this money does not grow on trees. They are paying for it through income tax payroll deductions and other Federal taxes.

There is every reason to believe Federal health insurance would follow the same pattern. It would start out on a pay-as-you-go basis, and would wind up as part of a general social-welfare program, supported by frequent and costly raids on the Treasury.

The Democratic National Committee believes the idea of compulsory health insurance is good campaign material. It is no better than any socialistic appeal, any effort to bring under Federal control institutions which have grown and flourished in our traditional atmosphere of individual liberty and freedom.

It is our firm conviction that compulsory health insurance would result in lower medical standards and service at higher cost to the individual and progressive regimentation of the medical profession which would blight incentive and slow down the wheels of progress in research and scientific development.—Editorial, *Marquette Mining Journal,* October 18, 1950.

AS WE SEE IT

Just a Few Notes About "Stupidity"

Just in case you don't care much for the administration's "socialized medicine" plan—quite a few people don't—you should fully understand that (in one man's opinion) you're stupid and dangerous."

That's on the word of Mr. Oscar Ewing, who is the federal security administrator and—presumably—would be the man who would be responsible for your "cradle-to-the-grave" medical care, if the administration plan became law.

Mr. Ewing made a speech the other day, in which he lumped together under one label all the people who have the silly idea that they'd prefer to arrange for their medical care and pay for it

(Continued on Page 1384)

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AS WE SEE IT

(Continued from Page 1382)

themselves—and the label he gave 'em was that above: "stupid and dangerous."

Of course, Mr. Ewing *did* declare that the plan isn't "socialized medicine" (which sounds like a stupid statement to us), but even at that, if it isn't "socialism," why use the tactics of socialism in promoting it?

By the "tactics of socialism" we mean the extreme expression of intolerance of any views other than his own which characterized Mr. Ewing's address. Intolerance has been a characteristic of every socialistic move in history—the grouping together of every one who thinks differently and "putting a brand" on him.

Not everyone agrees that the federal medicine program, would be good for America. And some very brilliant men are among those who do not agree.

Lump labels are dangerous business—because they are very likely to reveal stupidity on the part of the person voicing them.

Some very famed scientists, whose contributions to health and comfort are beyond estimation, are opposed to the administration's federal medicine plan.

Some famed liberal leaders, both in congress and out, are opposed to the plan.

Some noted sociologists, whose business is the improvement of mankind's lot, are opposed to it.

And a deuce of a lot of Joe, Jim, John and George Does, who still retain a measure of independence and prefer to paddle their own canoes rather than sucking at the breasts of a "benevolent government," are opposed to it.

Are all those men "stupid and dangerous?"

Apparently, in Mr. Ewing's opinion, they are. And their "stupidity and dangerousness" appears to lie in this: that they don't agree with Mr. Ewing and the administration.

Even as campaign propaganda, Mr. Ewing's statement seems stupid to us—stupid because it reveals to the public an intolerance of other men's views and a desire on the part of a paid "servant of the people" to ram his opinions down their throats, brooking no opposition.

That has no place in a government such as ours was intended to be—and when it has a place in the government, we'll then have the sort of regime we've been told we were fighting to avoid.

Presumably, as we said, Mr. Ewing would be the man who would administer the federal medicine program, if it became law.

Suppose you were sick but his people said you weren't—would you then be "stupid and dangerous" because you disagreed—and get no medical care?

Anyway, we'll take a few "stupid" steps and realign ourselves with the ranks of the "stupid and dangerous"—because we think it would be a tragedy for America and another step into the frauds and idiocies of socialism if the program ever were enacted.

One good thing, though, we see in Mr. Ewing's speech.

He has made very, very clear the greatest single reason we're opposed to the "socialized medicine" plan—it would of necessity require that great power be put into the hands of its administrators, who then would have the authority to brand other men "stupid and dangerous" and force their views on those men, through their control of the facilities for healing.

There are other reasons why we oppose the program (one of which is that we don't think it will work), but that's the greatest one.

Such power as that, we think, has no place in America—nor has any measure which would create it.—Editorial, *Fort Smith Times Record,* October 2, 1950.

MEDICINE BY COERCION?

Toward a Reign of Terror

Dr. Harry M. Hedge, president of the Illinois State Medical Society, reports that his office on Michigan Ave. was entered and his files rifled by snoopers who apparently wanted to examine his income tax records. The incident is alarming, especially since it parallels a similar invasion last year of the office of the American Medical Association.

The prowlers who rifled the files of Dr. Hedge were no ordinary burglars. Sneak thieves would have carried off valuable tools and office furnishings. The invaders apparently took nothing except a batch of clippings from *The Tribune* dealing with the recent demand by the FBI for the records of the medical society. Some of the clippings were of an editorial in which we said the investigation was an act of a political gestapo inspired by the opposition of medical men to Senator Lucas.

(Continued on Page 1386)

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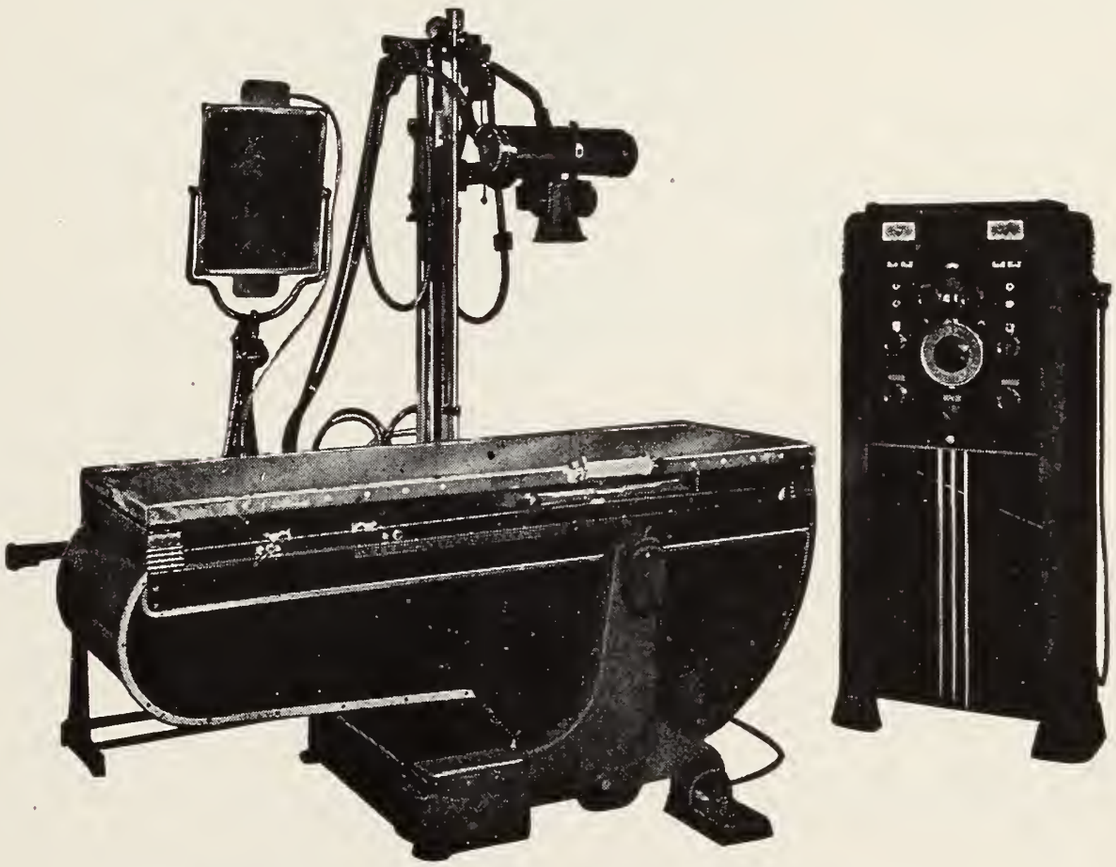

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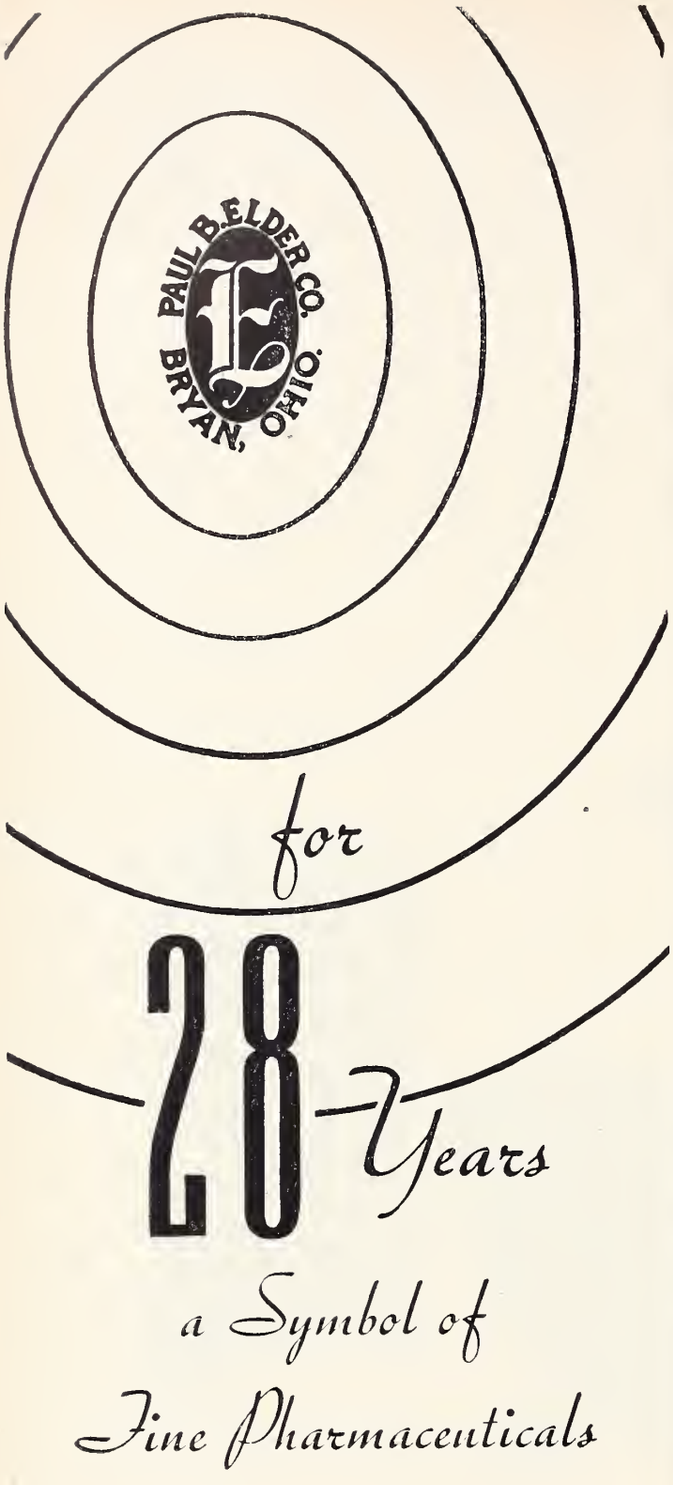

MEDICINE BY COERCION?

(Continued from Page 1384)

Evidently Mr. Truman's gestapo also is trying to get something on the officers of the medical society.

If the Treasury or Justice departments have good reason to suspect any citizen of wrong-doing, proper legal processes are available by which his records can be examined. The Constitution is explicit, however, in forbidding snooping expeditions. It says:

"The right of the people to be secure in their persons, houses, papers, and effects against unreasonable searches and seizures, shall not be violated, and no warrants shall issue but upon probable cause, supported by oath or affirmation, and particularly describing the place to be searched and the persons or things to be seized."

There is, of course, no such security in Russia, where any man's house can be searched at any time and where any man can be hustled off to a slave labor camp if he dares to express opposition to government policies.

Incidents are multiplying that we are moving in the Russian direction in spite of the Constitution. One phase of the movement seems to be designed to intimidate organizations which are seeking to influence public opinion by circulating books and tracts criticizing the New-Fair Deal hierarchy.

An organization called the Committee for Constitutional Government recently arranged to distribute copies of John T. Flynn's book, "The Road Ahead: America's Creeping Revolution." Through the committee, a small number of persons bought several thousand of these books. As a result, Edward A. Rumely, executive secretary of the committee, was hailed before Representative Buchanan's special house committee to investigate lobbying, which demanded the names of the book purchasers. Mr. Rumely refused, and was cited for contempt.

Why does the committee want these names? John T. Flynn answers the question in the first issue of the excellent new magazine, *The Freeman*. Says Mr. Flynn:

"With the names in hand, the invisible government in Washington can proceed to work on its campaign of intimidation. The government's instruments of harassment are numerous, and where the government's powers stop, its various privately financed allies can take up the work.

(Continued on Page 1388)

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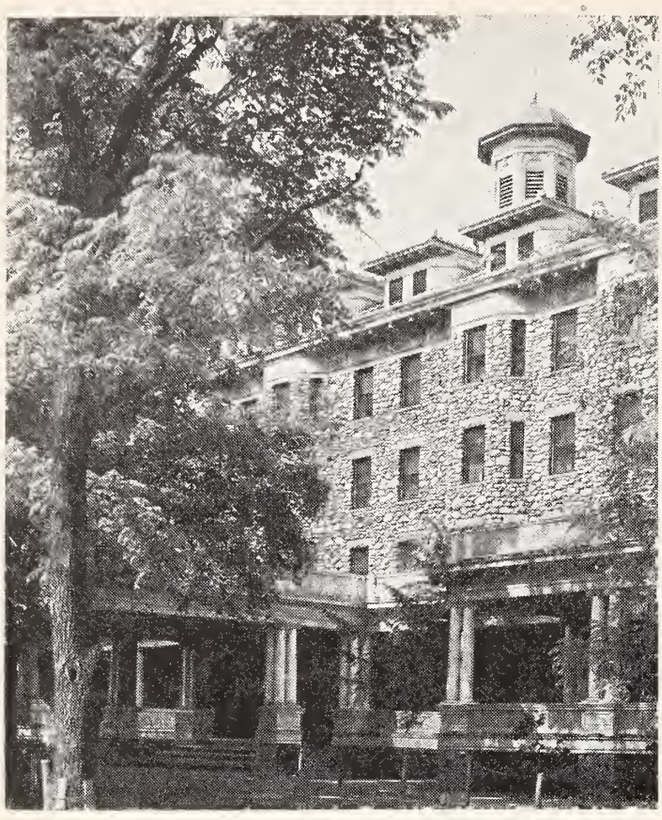

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THE BATTLE CREEK SANITARIUM
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MEDICINE BY COERCION?

(Continued from Page 1386)

"Not long ago such a group came into possession of the names of the contributors to another organization. Presently the agent of one of these groups called on one of the largest contributors to this organization. He coolly informed this gentleman that upon investigation he knew that almost half of the customers of his company belonged to elements in the population who could be stimulated to boycott his products if they knew he was contributing to the condemned organization."

Thus we have come to the point where no citizen can feel free to protest against the Washington powers. in spite of the Constitutional guarantees of freedom of speech and the press, the right to petition for a redress of grievances, and the right to be secure against unreasonable searches and seizures.

Circulate all the left wing propaganda that you like, but don't try to organize propaganda for the principles of the Constitution. If you do, the FBI may be at your door, or your office may be rifled, or your business may be boycotted.—Editorial, *Chicago Daily Tribune,* October 16, 1950.

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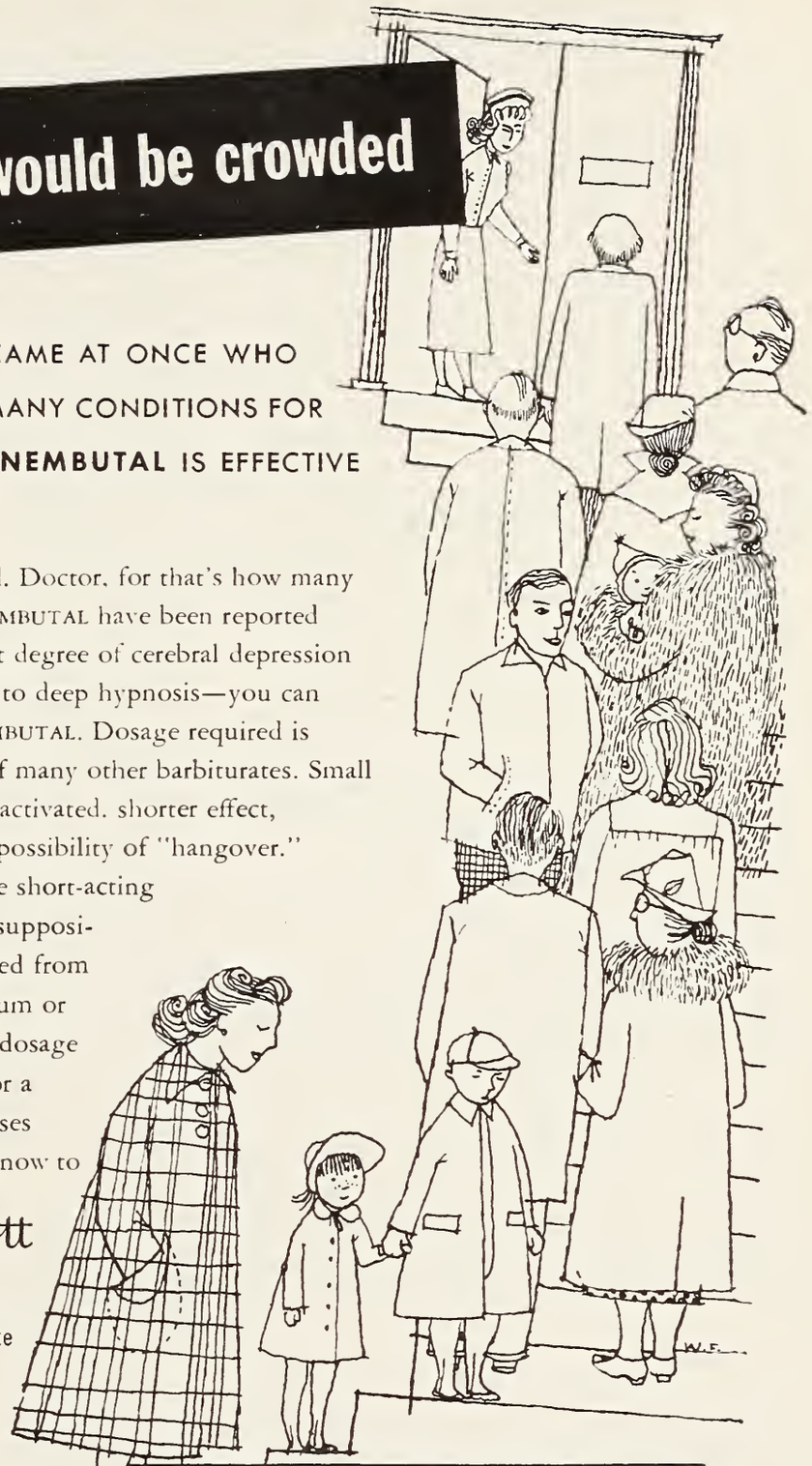

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World Medical Association

Five hundred medical leaders—representing twenty-eight nations of the world—gathered in New York, October 17-20, 1950, to discuss problems of the medical profession and to hear reports on medical progress.

The occasion was the fourth General Assembly of the World Medical Association, a voluntary organization of national medical associations in forty-one countries with a combined membership of nearly 500,000 physicians. More than 225 American doctors attended the meeting, the first W.M.A. General Assembly to be held in U. S.

Euthanasia (mercy killings), Nazi medical atrocities, the British National Health Service and other issues came up for discussion as well as the latest developments in endocrinology, gastroenterology, and other medical areas.

The W.M.A., which held its first meeting of the General Assembly in Paris, September, 1947, has as its aim the betterment of health throughout the world.

"The motivation of the World Medical Association is conspicuously free from political and nationalistic purposes," Dr. Louis Bauer of New York explained. Dr. Bauer serves as secretary-general of the W.M.A. at its New York headquarters and is also chairman of the board of trustees of the American Medical Association.

War in the Far East prevented some delegates from attending. Because visas had been frozen under the new Internal Security Act, at least ten delegates from Europe and South America failed to arrive.

Russia has never been represented in the W.M.A., but some of the countries now in the Soviet bloc have been. However, all but one have withdrawn, and that one, Bulgaria, did not send a delegate to the recent meeting.

One of the highlights of the assembly was the inauguration at the opening session on October 17 of Dr. Elmer L. Henderson of Louisville, Kentucky, as president of the W.M.A. Dr. Henderson was installed as president of the American Medical Association in June of this year and thus becomes the first physician ever to lead simultaneously the two largest medical associations in the world.

At the inauguration, Dr. Henderson said "physicians by their thinking, spirit and effort can set an example for governments, diplomats and people everywhere to preserve the peace." Noting that the W.M.A. is uniting the medical profession of the world, he declared, "continued increased co-operation of that kind is one of the necessary ingredients for building a better world." He called upon the doctors of the world to "demonstrate convincingly that international co-operation is a workable reality."

Dr. Charles Hill of London, retiring president, was unable to attend the medical meeting. Conflicting duties in parliament prevented his coming. He sent a message to delegates expressing faith in the accomplishments of the W.M.A.

Dr. Hill, however, expressed serious dissatisfaction with the present British National Health Service. He wrote that the general practitioner in England is losing both patients and prestige. If it becomes clear that no prospect for satisfactory settlement is in sight, "preparations should be made for a withdrawal of general practitioners from the National Health Service," Dr. Hill asserted.

General policy and medical ethics sessions of the General Assembly drew the largest attendance. At one spirited gathering, W.M.A. delegates voted "to condemn the practice of euthanasia under all circumstances" as "contrary to the public interest and to medical principles as well as to natural and civil rights."

Dr. S. G. Sen of India, and Dr. E. A. Gregg of Great Britain, fought a losing battle in favor of "mercy death with the consent of the patient and the state to bring an end to intolerable suffering." They argued many doctors have used drugs to speed the death of patients suffering from incurable diseases.

Delegates from Ireland, France and the U. S. were strongly opposed. Dr. Marcel Poumailloux of France, declared approval of euthanasia would "open the door to all possible crimes and criminal practices."

W.M.A. delegates voted to authorize the Council, the executive body, to consider any applications of doctors of Western Germany and Japan to membership despite the protests of two Israeli physicians, Dr. Emil Adler and Dr. S. G. Zondek.

The Israeli delegates protested that many doctors in Germany had been involved in and had even taken the initiative in such inhuman experiments as forced sterilization and vivisection of humans.

The charges of "crimes against humanity" were generally admitted by doctors of West Germany who declared: "We hereby solemnly give our promise through the World Medical Association to the medical profession through the world never again to participate in or to permit such a betrayal of medicine." The German physicians promised expulsion of members personally guilty of crimes referred to and those not willing to "maintain a high standard of professional behavior in the future."

The decision was thirty-three to three in favor of referring action to the Council. Dr. Adler said he did not object to the organization having relations with German physicians, but that there should be a "probation time" before admission to membership.

The assembly adopted another resolution disapproving attempts "by various governments to control the traditional freedom of science by dictating judgments on such biological and medical questions as genetics anthropology and even physiology to serve political ends." References to Soviet Russia and Nazi Germany as the governments in question were deleted.

Fraudulent and misleading drug advertisements were also criticized and delegates were advised to warn the public against new discoveries not fully tested.

At scientific sessions, doctors heard the latest advances

(Continued on Page 1392)

Announcement . . .

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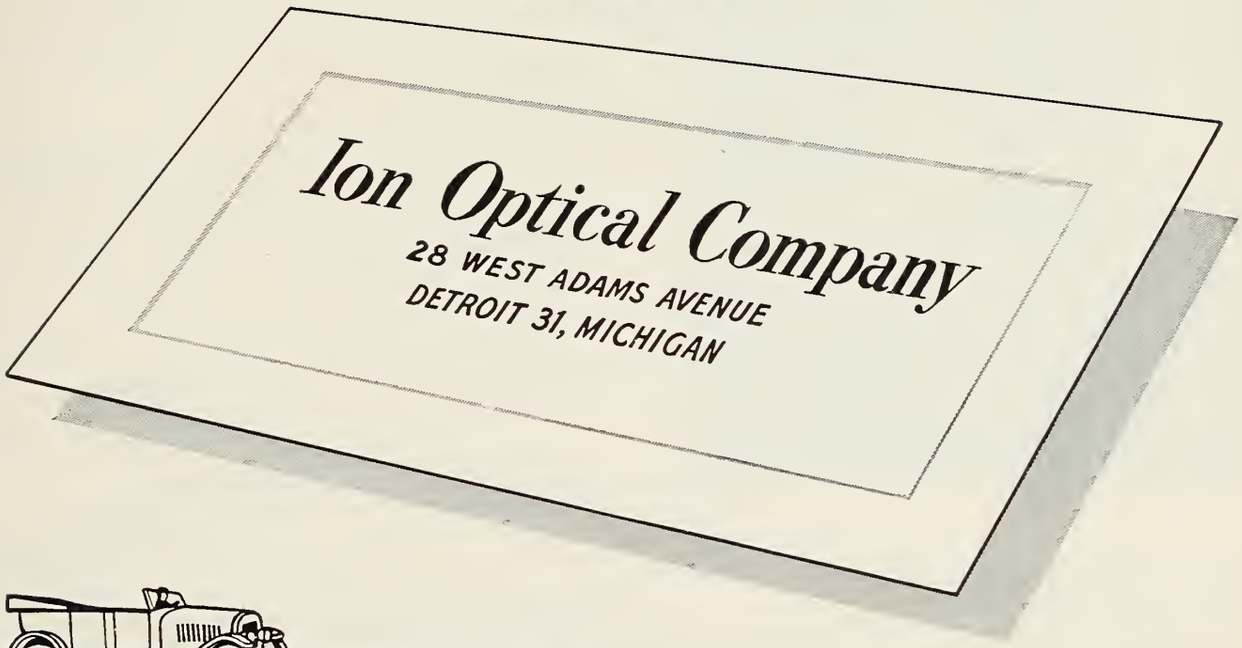

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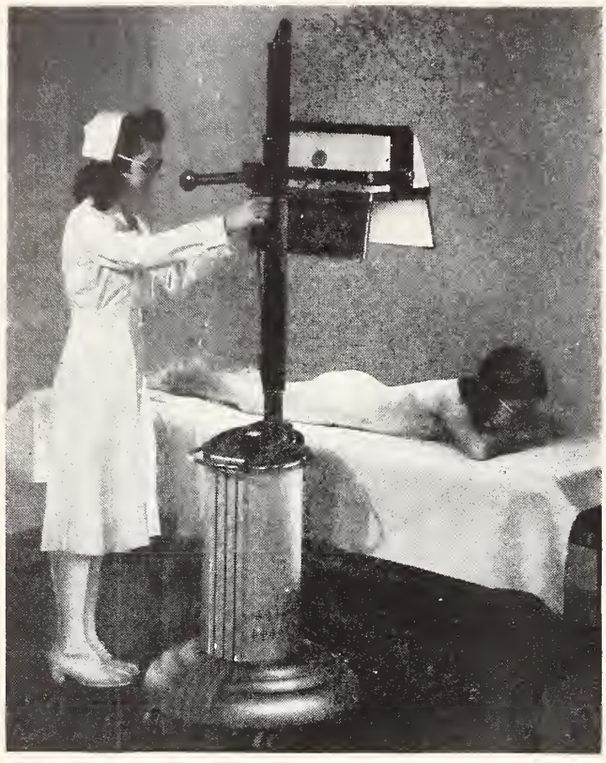

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(Continued from Page 1390)

in endocrinology, gastroenterology and in therapeutic uses of blood and blood derivatives.

Dr. Hans Selye of the University of Montreal, Quebec, told delegates his years of animal and clinical experiments suggested that the pituitary-adrenal glands were like balance wheels of life.

Studies reveal, he said, that these glands enable the body to adapt itself to all types of stresses including those caused by such baffling diseases as high blood pressure, kidney and blood vessel diseases, rheumatic diseases and others.

"We think derailments of the adaptive mechanism are the principal factors in production of certain maladies," Dr. Selye stated. "Worry may even weaken the pituitary-adrenal gland factories which produce ACTH and cortisone," new defenses against arthritis and other degenerative diseases.

Dr. Albert F. R. Andresen of Flushing Hospital, Brooklyn, N. Y., reviewed diseases of the stomach and intestines, declaring that "most medications for ulcer are useless," and that so-called hyperacidity plays no important part in causing ulcer and requires no treatment.

"The treatment of uncomplicated ulcer in view of the fact that it is known to heal spontaneously should consist simply of a bland, well-balanced diet, a little high in protein values, with frequent feedings," said Dr. Andresen.

Special treatment, even operative techniques, are sometimes necessary, however, if perforations or persistent hemorrhages are evidenced, he added.

The director of blood banks for the National Red Cross, Dr. L. K. Diamond of Boston, told the medical men that the world's blood needs have greatly increased in the last few years because of the need for blood stockpiles for defense. He estimated that the U. S. would need from four to five million pints of blood per year to meet civilian needs plus an undertermined amount for military and civilian stockpile in case of emergency.

The American Medical Association was host to delegates at a dinner on October 19. At that time Dr. Roger I. Lee of Boston, past president of the AMA, told the assembly that medicine, unlike most professions, does not patent its products and procedures but makes them available to the public.

"Patents have enriched many inventors and some scientists outside the medical field," Dr. Lee said. "I wonder what the public reaction would be if a valuable remedy were cornered and exploited by a patent with the result that people died for want of the remedy?"

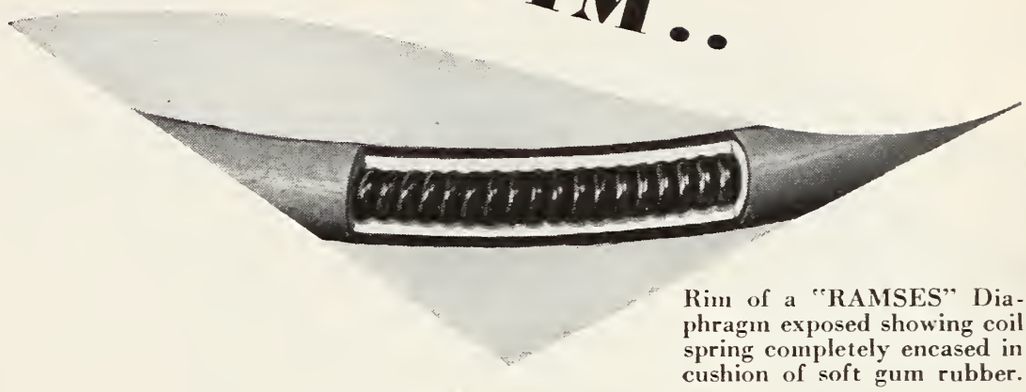
On October 20, delegates visited West Point where Major General Bryant E. Moore, superintendent of the U. S. Military Academy, told visitors that the medical profession could prove to be a forceful factor in promoting world peace.

"With each year has come a deeper realization that members of the medical profession are the true international diplomats of peace," General Moore said at a luncheon meeting. "Your influence is based upon the

(Continued on Page 1394)

Say you saw it in the Journal of the Michigan State Medical Society

COMFORT IN A RIM..



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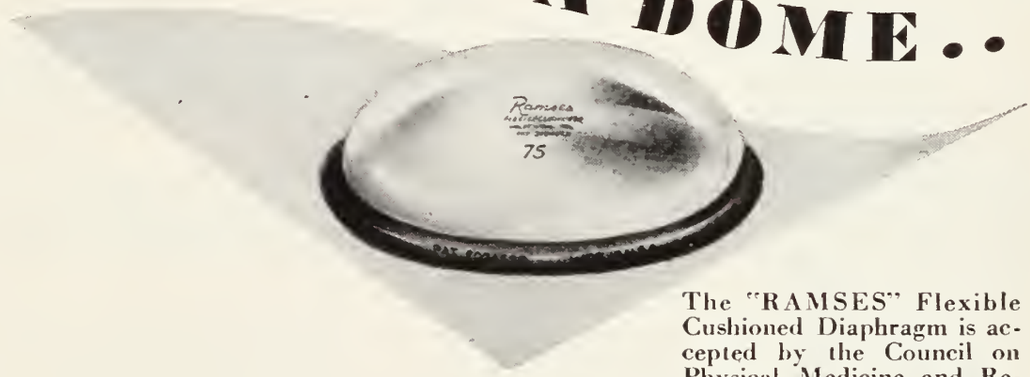

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A diaphragm dome must not only occlude the cervix—it must have a reasonably long life. The exclusive process used in manufacturing the dome of the "RAMSES" Diaphragm from pure gum rubber produces velvet smoothness, plus flexibility and long life.

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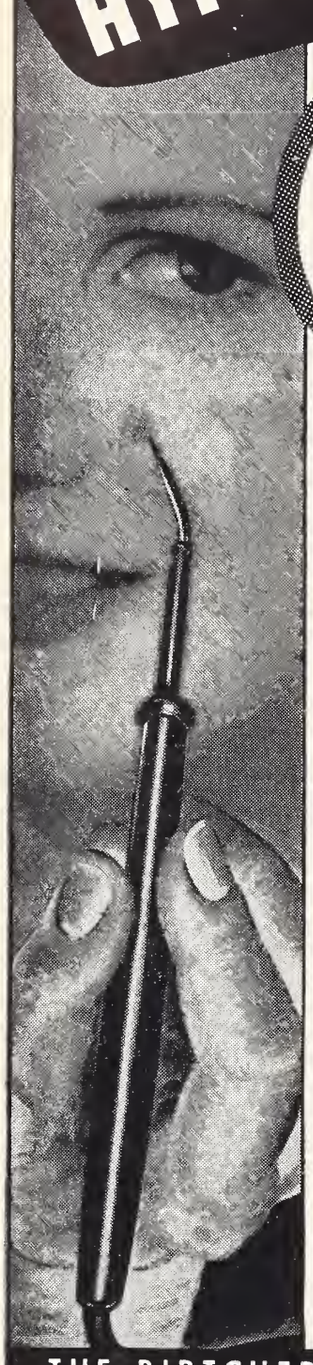

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(Continued from Page 1392)

esteem in which peoples of all countries hold the profession of medical sciences. It is not improbable that a road to permanent peace will be found through your efforts to expand the horizons of medicine."

At the concluding session of the assembly Dr. Dag Knutson of Djursholm, Sweden, was unanimously chosen as president-elect of the organization. He will take office at the fifth General Assembly of the W.M.A. to be held in Stockholm, Sweden, September 15-20, 1951. Delegates voted to hold the 1952 meeting in Athens, Greece.

Dr. Knutson has been president of the Swedish Medical Association since 1946. A specialist in internal disease and head of the University Policlinic for Internal Disease at Karolinska Sjukhuset, Stockholm, Dr. Knutson has served on the Council, the executive body of the W.M.A., since 1947.

Dr. Otto Leuch of Switzerland, was reelected treasurer and the following council members were reelected: Dr. J. A. Bustamante, Cuba; Dr. S. C. Sen, India; Dr. R. L. Sensenich of South Bend, Ind., and Dr. L. Garcia-Tornel of Spain.

A Conference of Medical Editors of the World was held on October 21, with Dr. Morris Fishbein of Chicago, editor of the *W.M.A. Bulletin,* as chairman.

CANCER COMMENT

(Continued from Page 1380)

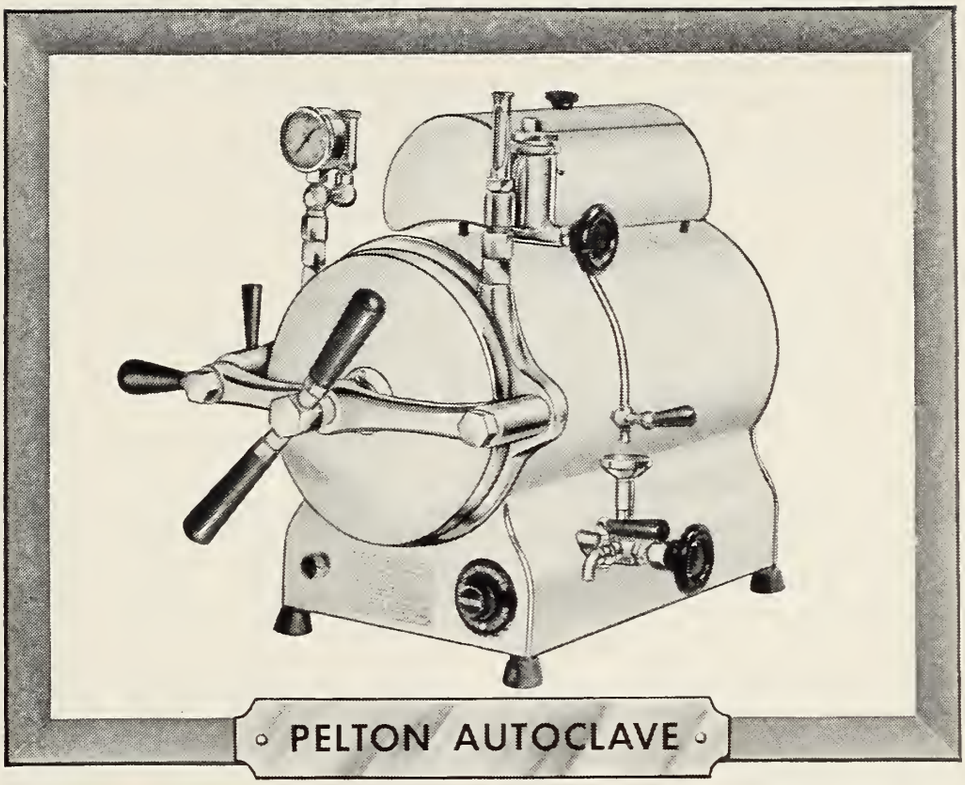
new agents give promise of becoming valuable tools after they have been further refined. At present they are all in the laboratory, or experimental stage.

Professor Paul D. Bagwell, of Michigan State College, East Lansing, emphasized the importance of the individual's responsibility for cancer control. He pointed out the many facilities, including the Hillsdale Plan, for the diagnosis and treatment of cancer in Michigan but stated that their value depended on the willingness of the public to use them. Ignorance and carelessness were two factors that prevented acceptance of these facilities. Both factors could be routed by a more intensive and extensive lay education program.

Professor Bagwell urged his audience to replace their unfounded fears of cancer with known facts and thus avoid the fatal delay that so often dooms the cancer patient to an untimely death.

Following adjournment of the Conference, the Cancer Control Committee met and agreed to hold another conference in 1951 under the same auspices. A sub-committee was appointed to plan details of the program.

Say you saw it in the Journal of the Michigan State Medical Society



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Death on Bacteria

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Military Medicine

NEW TYPE OF ARMY MEDICAL COMPANY TO SEE SERVICE IN KOREA

A preventive medicine unit of company size, first of several of its kind now being organized by the Army Medical Service, has arrived in the Far East Command for duty in Korea, Major General R. W. Bliss, the Army Surgeon General, announced November 6, 1950.

Successor to the malaria survey and malaria control detachments which played key roles in the Southwest Pacific and elsewhere during World War II, the new company has functions beyond the scope of previous units of this type. In addition to malaria control and survey, the units will be responsible for inspections of field sanitary conditions and control of insect-borne, water-borne and other diseases. When acting in support of combat troops, these companies will operate as far forward as necessary to accomplish their mission.

The new preventive medicine companies are composed of six officers, one warrant officer and fifty-nine enlisted men. Units are being organized at Brooke Army Medical Center, Fort Sam Houston, Texas. Officer personnel are qualified entomologists or sanitary engineers, and the enlisted men have had training in one or more phases of preventive medicine.

The preventive medicine company is composed of a headquarters section, to accomplish command and administrative work, and a preventive medicine service subdivided into a hygiene and sanitation section, survey section and three control sections.

The hygiene and sanitation section investigates water points, waste disposal, troop shelter, bathing and laundering facilities, mess sanitation, contamination of food or water and adequacy of clothing. The survey section inspects sanitary discipline in other units, determines the incidence and distribution of insect-borne and similar diseases and checks on the origin of cases of these diseases admitted to hospitals in its area. The control section furnishes technical supervision for work details engaged in sanitary control measures, and also conducts on-the-job training of soldiers in insect and rodent control measures, and recommends corrective measures for other units.

TRIPLER HOSPITAL, HONOLULU

High praise for the Army's newest and best-equipped hospital, Tripler Army Hospital, near Honolulu, Hawaii, was given by Major General R. W. Bliss, the Surgeon General.

In meeting one of the Nation's greatest responsibilities to the men who have borne the battle in Korea, Tripler Army Hospital has played a most important part.

Aside from caring for its own regular patient load, which recently occupied over 900 beds, Tripler has given an average of two days of rest, comfort, and necessary medical attention to over 5,000 patients evacuated from Korea and Japan to the United States. General Bliss feels that without this vital link in the chain of evacuation, many types of patients would have to remain because their condition would not permit a nonstop flight from the Far East.

Tripler Army Hospital, little more than two years old, is jointly staffed by Army, Navy and Air medical personnel and cares for patients from all three military services as well as for Veterans and Public Health Service beneficiaries. Universally considered outstanding in hospital architecture, Tripler incorporates many features designed to keep the hospital abreast of medical developments for many years to come. Among these features are:

Recovery ward, in which every bed has available an oxygen and a suction outlet for immediate use in any emergency; specially-partitioned wards, designed and located in accordance with the needs of each service; a special shelter and large dayroom at the end of each ward, which provide space for recreation during normal times and a means of expanding the ward in case of necessity; a pneumatic tube system connecting all wards, clinics, and departments of the hospital, which allow necessary papers to be sent rapidly from any part of the hospital to any other; and a neuropsychiatric section, providing indoor and outdoor recreational space, dining rooms, and therapeutic facilities without the atmosphere of confinement common to most hospitals that care for mentally and emotionally disturbed patients.

Planned to overcome the serious lack of adequate military medical facilities in the mid-Pacific area demonstrated during the second World War, Tripler Army Hospital was authorized by Congress in June, 1944, and opened its doors in July, 1948.

907 REGISTERED IN MEDICAL DRAFT

State Total Includes 622 Doctors, 190 Dentists

Complete returns from local draft boards show 907 medical doctors, dentists and veterinarians were registered in Michigan October 16 under new provisions of national selective service regulations.

Col. Glenn B. Arnold, state draft director, said the list includes 622 medical doctors, 190 dentists, and ninety-five veterinarians.

The special draft registration embraced doctors under fifty years of age who were trained in army or navy specialized programs and those deferred from military service during World War II to complete medical education or those who served less than twenty-one months in actual duty after special training.—*State Journal,* Lansing, October 26, 1950.

The average patient waits three months after the onset of symptoms of lung cancer before seeking medical advice.

The JOURNAL

of the Michigan State Medical Society

Issued Monthly Under the Direction of the Council

VOLUME 49 DECEMBER, 1950 NUMBER 12

Cardiac Research

By F. Janney Smith, M.D.

Detroit, Michigan

THE RATE of progress of cardiac research has been recently accelerated due to the stimulation resulting from the knowledge that heart and blood vessel diseases now rank as the first cause of death, greater than the next five causes combined, including cancer. The chief contributing cause to this mounting prominence of degenerative cardiovascular disease is a beneficent one: the conquering of infectious diseases. More and more people are surviving or avoiding infections only to succumb at a later age to degenerative diseases. These facts have given rise to pressure from the life insurance companies to encourage research in cardiovascular diseases through the formation of the Life Insurance Medical Research Fund. Also, the American Heart Association through its own funds and those of its affiliates, as well as the National Heart Institute, have made funds available to qualified workers in the field of cardiovascular research, giving further aid and stimulation to investigators in this field.

To one who has spent more than half his life in the practice of cardiology, great progress through cardiovascular research has already been made.

Rheumatic fever's ravages have been stayed somewhat by improvement in living standards, and by Rheumatic Fever Control programs such as we have in Michigan. Recurrences of rheumatic fever have been prevented by the prophylactic administration of sulfonamide drugs and by other antibiotics that control and prevent recurrent streptococcal infection. ACTH and Cortisone have occasionally proved to be life saving in the more malignant cases of acute rheumatic carditis.

Congestive cardiac failure has been more successfully treated by better understanding of the electrolyte problem, better digitalis preparations and diuretics.

Subacute bacterial endocarditis can now be cured by antibiotics in eighty per cent of cases.

The crippling effects of many congenital cardiac defects have been alleviated by the dramatic intervention of the cardiac surgeon with increasing success. Cardiac catheterization and related physiological studies have aided greatly in diagnosis and selection of suitable cases for operation.

Mitral stenosis is being attacked by commissurotomy with promising results.

In the field of coronary artery disease the use of anticoagulants in coronary thrombosis has significantly reduced the occurrence of thromboembolic episodes and reduced mortality.

The underlying atherosclerotic process in the coronary vessels has been shown to be related to cholesterol metabolism. Recent work by Gofman has indicated that by means of the ultra-centrifuge it may be possible to identify bloods of these people who are likely to develop arteriosclerosis by recognizing a preponderance of certain large cholesterol molecules which are capable of being deposited in the arterial walls. Best measures to be taken in the treatment of such individuals are not completely clear other than the use of low cholesterol diets, but the whole subject is under intensive study.

The addition of penicillin to our armamentarium for the treatment of syphilis has greatly reduced the number of people with cardiovascular syphilis.

Hypertension in its more serious aspects has been favorably influenced by sodium poor diets, rice diet, by dorso-lumbar sympathectomy, in some

cases by hyperpyrexia, and to a lesser extent by various drugs as well as protective living programs.

Advances in electrocardiography have been many and have contributed to more accurate localizing and defining of the extent of myocardial infarcts, as well as supplying diagnostic information applicable to many other conditions.

Industry has initiated periodic health examinations among both executives and employes thus permitting earlier detection of cardiovascular disease.

Research requires first of all qualified personnel. It next needs the inquiring mind and sufficient drive to overcome initial inertia. And it must have proper equipment from the point of view of materials and technical help. Many of these last named items are expensive. While great discoveries are not all bought with money, in the past many good research projects have "withered on the vine" for lack of funds. The isolated establishment of various small proven points may later be consolidated into truths of great medical importance. At present an organized approach to research seems justifiable.

The Michigan Heart Association has endeavored to exercise care in the choice of qualified workers and in allotting its funds for research projects. It is the purpose of this editorial to inform the members of the medical profession in Michigan as to the type of work now in progress making use of these allotments.

Reports of Research Projects Supported by the Michigan Heart Association

Gordon B. Myers, M.D., Wayne University, Detroit, has been carrying on a varied research program jointly supported by the Michigan Heart Association and the National Heart Institute. The following studies were completed during the past year and are being prepared for publication: A paper, "Treatment of Congestive Heart Failure with a Fifty Milligram Sodium Diet—Metabolic and Clinical Study," was read at the meeting of the American Heart Association in June, 1950. A study titled "Fluid and Electrolyte Balance in the Management of Acute Renal Insufficiency" was presented at the Eastern Meeting of the American Federation for Clinical Research. A manuscript on "The Quantitative Estimation of Calcium in Human Plasma by Flame Spectrophotometry" has been submitted to the *American Journal of Clinical Pathology.*

Several other studies have been submitted for the fall meetings of either the Central Society for Clinical Research or the American Federation for Clinical Research. These include:

(a) The water and electrolyte content of cardiac and skeletal muscle; comparative values in normal hearts, in digitalized and undigitalized hypertrophied hearts, in congestive failure and in myocardial infarction. Specimens were secured at autopsy from five standard sites in the heart from the pectoralis muscle. Analyses were made for water, Na, K, Cl, Ca, Mg, Fe, Cu and P in forty-one cases, and for water, Na, K in twenty-four aditional cases.

(b) A new method for the determination of protein-bound iodine in plasma or serum. This method differs in several important respects from all previous methods and is more rapid and circumvents certain sources of error inherent in present methods.

(c) Studies of renal function in Weil's disease.

During the coming year the following additional investigations are planned:

(a) A study of water, Na, K, Cl and N balance during development of congestive failure and during recovery under various therapeutic regimens. This represents a continuation and elaboration of the work reported at the American Heart Association meeting in June.

(b) A study of water, Na, K, Cl and N balance in acute glomerulonephritis and in the nephrotic syndrome. This is also a continuation of work in progress. The practical nurses and technicians supported by the Michigan Heart Association grant for 1950-51 have an essential role in both of the foregoing projects.

(c) The use of catheterization techniques for selection of cases of mitral stenosis for commissurotomy and for evaluation of operative results.

(d) The employment of similar techniques for an investigation of the effects of vasodilator drugs on pulmonary hemodynamics in chronic cor pulmonale. These studies will be carried by Dr. Harper K. Hellems, Assistant Professor of Medicine, assisted by Dr. Henry Uhl, Research Fellow under the Michigan Heart Association.

Conrad Lam, M.D., Henry Ford Hospital, Detroit. In the surgical laboratory of the Henry Ford Hospital, Dr. Conrad Lam and his associates have been able to transplant the aortic valves of donor animals into the descending aortas of other animals, and these valves have been proved to be functioning months after the operation. The techniques used in these experiments were subsequently applied in a human case in which a large fusiform aneurism of the thoracic aorta was replaced by a homograft.

Dr. Lam and his associate, Dr. Munnell, have investigated the value of the use of modern elec-

tronic apparatus for measuring physiologic pressures during intracardiac operations for valvular disease. In twelve operations on the mitral valve, such determinations were found to be of definite prognostic significance. Interesting observations were also made during the Brock operation for pure valvular stenosis of the pulmonary artery.

Robert F. Ziegler, M.D., Henry Ford Hospital, Detroit, has been making a study of "The Influence of the Intraventricular Conduction on the Electrocardiographic Pattern of Ventricular Hypertrophy." This project has been delayed for lack of a qualified assistant. Therefore, it was thought advisable to return the funds allotted for this research to the Michigan Heart Association. The work will be carried on at a slower pace, although a certain amount of experimental surgery will have to be incorporated before it can be completed. The majority of the work at present will be confined to accurate measurement of clinical records now available. This study should yield information of great practical use in the diagnosis of single chamber enlargement.

James L. Wilson, M.D., University of Michigan, Ann Arbor, is obtaining complete diagnostic and pertinent metabolic studies on children with congenital heart disease in an attempt to work out simpler and more practical methods of diagnosis. Psychometric and personality studies before and after operation are planned for the future. Dr. Stern is actively engaged in this work and a technician is at work on the chemical and metabolic determinations.

Franklin D. Johnston, M.D., University of Michigan, Ann Arbor, with the help of a research fellow is studying particularly the areas of electrocardiographic deflections and the ventricular gradient by means of a newly developed electronic integrator and is also conducting a study of low frequency vibrations produced by the heart.

Sibley W. Hoobler, M.D., University of Michigan, Ann Arbor, beginning on July 1, has assembled an artificial kidney of the type described by Leonard and Skeggs. Present efforts are being directed as follows:

(a) Application of the artificial kidney to patients with uremia and hypertension.

(b) Demonstration that a small molecular pressor substance (arterenol or norepinephrine) will pass through the cellophane filter and be detected in ultrafiltrate from the kidney.

(c) Investigation of certain procedures to concentrate and increase the yield of norepinephrine from the ultrafiltrate.

(d) To establish the best and most suitable method for assay of pressor activity of unknown ultrafiltrates.

David F. Bohr, M.D., University of Michigan, Ann Arbor, is working on several projects.

(a) The role of neurogenic and humoral factors in determining the vascular resistance of the salivary gland in sustained arterial hypertension. The technique of isolation of the arterial supply and venous drainage of the submaxillary gland of the dog has been refined. Preliminary observations have been made demonstrating an increase in the peripheral vascular resistance of the gland in response to the arterial administration of both renin and hypertension.

(b) Diagnostic and prognostic significance of the brachial-to-digital systolic pressure gradients in hypertension. Two separate types of data are being collected for this project: (1) An attempt is being made to determine pressure gradients on all patients with elevated blood pressures who are patients in the University Hospital. From this information it is hoped to have data which will enable one to determine whether the various types of hypertension may be differentiated on the basis of variations in brachial-to-digital systolic pressure gradients. (2) Selected patients will be studied through long-term courses of treatment in order to determine if data is of prognostic value.

(c) Assay of blood ultrafiltrates for pressor and antidiuretic activity. This study is being carried out in conjunction with Dr. Sibley Hoobler and depends both on the production of the ultrafiltrates in the artificial kidney and on the refinement of our salivary gland technique for assay of pressor substance.

(d) The role of smooth muscle of the heart in governing cardiac output. At the time this project was proposed to the Michigan Heart Association two types of data were available indicating that tonus change, and hence the smooth muscle activity of the turtle heart, played an important role in determining cardiac output. First, spontaneous rhythmic increases in tonus of the turtle heart are accompanied by decreased cardiac output. Next, a substance that reduces the tonus of smooth muscle causes a marked increase in cardiac output in the turtle heart. Additional indirect evidence has now been obtained that smooth muscle plays an important role in the cardiac output in the lower vertebrates. In the snake heart, which displays much less spontaneous rhythmic, tonic activity than the turtle heart, the administration of hesperidin methyl chalcone, which has a specific relaxing effect on smooth muscle, has a much less prominent effect on cardiac output. The effect of smooth muscle activity on the cardiac output in the mammalian heart remains to be evaluated.

Cameron Haight, M.D., University of Michigan, Ann Arbor, together with Dr. Cowley, is working on an improved method for determination of coronary blood flow which is to be applied in work aimed at improving surgical means collateral circulation from extra-coronary sources. This should aid in alleviation of angina pectoris.

John C. Bielawski, M.D., Detroit, has been employed by the Michigan heart association to direct its section on Occupational Cardiology as an expression of the desire of the Association to be of help in the employment problem posed by patients with heart disease. Initially, he made an extended field trip, contacting the leaders in this work in various sections of the country and set up his section to provide consultation service to industrial physicians in the problems raised by employment of cardiacs. Under the direction of E. A. Irvin, M.D., Medical Director of the Cadillac Motor Car Division, General Motors Corporation, he spent a preliminary three months in actual in-plant service. With this background consultation service has been rendered to ten different industries in Detroit through their industrial physicians, and interviews have been had with numbers of other people interested in industrial health and hygiene. Dr. Bielawski has written an important paper on "Employment Problems Facing the Cardiac Patients," which was published in December, 1949, in The Journal of the Michigan State Medical Society. This article reached virtually every physician in Michigan and reprints were requested widely from various groups outside the state, including a number of other Heart Associations. The paper also was read before a large number of medical meetings and interested groups.

Several other projects have been carried on such as the cardiac survey program, detailed in another article, "An Approach to the Study of Cardiac Disease in Industry," stressing techniques of discovering disease states in preclinical phases in order that early correction may prevent disability. This preventive medical viewpoint has resulted in chest x-ray screening at pre-employment and periodic industrial examinations. This included a study of the usefulness of the electrocardiogram. Utilizing the men of the Cadillac Motor Car Division, a total of six hundred thirty electrocardiograms were done as part of a routine examination. Thirty-eight electrocardiograms were abnormal. Of these abnormal electrocardiograms only thirteen patients were aware of heart disease. Twenty-five patients had no knowledge of heart disease.

To extend the range of techniques studied, a Multiphasic screening technique is now being planned, utilizing a short history, routine industrial examination, seventy millimeter photofluorogram of the chest, electrocardiogram, and urinalysis.

Another was the cardiac housewife project. The possibility of time and motion studies applied to the work in the home is of great value to housewives with limited physical reserve. The technique in saving steps and effort for the housewife disabled by heart disease was first observed on the New York field trip. Inquiry disclosed an expert in Detroit, Mrs. Sanderson, chairman of the Department of Home Economics, Wayne University.

With her help it was decided to study closely one cardiac housewife to see whether a program emphasizing change made at a minimum cost would be of benefit. The work savings effected and the utilization of pictures, lantern slides and charts to demonstrate the technique, led to its adoption as part of the program of the Michigan Heart Association on March 9, 1950. More cases have been carefully studied since. Arrangements are being made to ask Dr. Irma Gross of Michigan State College to extend the problem to the rural housewife. A merging of this cardiac housewife program with the industrial program resulted in changing the name of the section to "Occupational Cardiology." It is hoped that a positive approach to cardiac disease emphasizing remaining ability rather than disability has been helpful in enabling cardiac patients to remain useful, productive members of society.

F. Janney Smith, M.D., Henry Ford Hospital, Detroit, is concerned with observing the clinical use of anticoagulants, a study jointly supported by the Michigan Heart Association and the American Heart Association. This is being carried on as part of Dr. Irving S. Wright's Committee on Anticoagulants for the American Heart Association. So far the work has consisted of an alternate case study in myocardial infarction, comparing heparin and discumarol with paritol and tromexan. Paritol is a relatively new, synthetic heparinoid substance for parenteral use and has proved to be quite as satisfactory as heparin. It will be much less costly. It has been used in nearly fifty patients.

Tromexan, a synthetic coumarin for oral use, has a considerably more rapid action than dicumarol and also a more rapid excretion. Tromexan has been used in eighty patients. It is quite satisfactory in its anticoagulant effect, and it is attended by fewer hemorrhagic complications than dicumarol. The results of these studies are being compiled statistically with those of four other members of the Committee on Anticoagulants for the American Heart Association.

J. A. Johnston, M.D., Henry Ford Hospital, Detroit, has been engaged in the determination of the effect of ACTH on the storage of nitrogen and calcium in the growing child by the balance technique. This was felt to be important because any desirable effects need to be weighed against adverse effects on growth. It has already been shown that one immediate effect of ACTH administration is a loss of nitrogen and calcium.

Ten patients are in the process of being studied or have had studies completed. Six of these had acute rheumatic fever and four had rheumatoid arthritis. The original observations would seem to be confirmed. However, the initial negative balances promptly revert to strongly positive ones —in the case of nitrogen—on withdrawal of ACTH. Even when ACTH is continued, positive nitrogen balances are possible if food intake is increased. It is too early for final conclusions, but the impression has been gained that a child in his initial attack is benefited almost miraculously by ACTH without any adverse effects on his total metabolism. The child with a well-established valvular defect does poorly. A much longer follow-up study will be necessary before any dogmatic statements may be made.

Paul V. Woolley, M.D., Children's Hospital of Michigan, Detroit, is directing research in rheumatic fever, number one cause of death in the years five to twenty in Michigan. Dr. Woolley's project concerns the use of ACTH and Cortisone in the following categories: (a) Fulminating instances of acute rheumatic fever, (b) Chronic rheumatic fever with evidence of continuing activity, (c) Instances of early rheumatic carditis, non-fulminating, (d) Acute cardiovascular failure including rheumatic, hemorrhagic nephritis, disseminated lupus erythematosus, and meningococcemia.

E. H. Watson, University of Michigan, Ann Arbor, is working on a project for the study of the effect of ACTH and Cortisone on the response of patients with severe rheumatic fever and rheumatic heart disease.

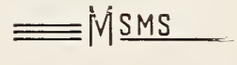
Noyes L. Avery, M.D., Blodgett Memorial Hospital, Grand Rapids, is observing the effect of ACTH and Cortisone upon two classes of rheumatic fever: (1) initial attacks in patients without previous history of rheumatism or heart disease, and (2) those dangerously ill with rheumatic fever.

Ben E. Goodrich, M.D., Henry Ford Hospital, Detroit, together with two associates is engaged in observing group differences in the frequency of thromboembolic complications. Cardiac, diabetic, tuberculous, and orthopedic patients are being studied by a modification of the Allen protamine titration procedure, which was originally divised to detect heparinemia. It had been previously a useful test in patients with a bleeding tendency.

By the use of siliconized glassware, waxed cork stoppers, and half the quantity of blood originally advised the test has proved consistent in revealing physiological variations in "heparin-like" substances. Results in cardiac, diabetic, tuberculous and orthopedic patients agree with and suggest an explanation for the group differences in frequency of thromboembolic complications. The data accumulated establishes the test as a dependable means of obtaining unique and valuable information.

The study continues to explore the metabolic, pathologic, and mechanical factors which are related to variations in thrombotic tendencies. The completed report will appear in the program of the Central Society for Clinical Research in November, 1950.

The Rheumatic Fever Control Program of the Michigan State Medical Society is aimed at the control and eradication of rheumatic heart disease in Michigan. Consultation and diagnostic centers are maintained in Detroit, Ann Arbor, Jackson, Lansing, Kalamazoo, Grand Rapids, Traverse City, Pontiac, Saginaw, Bay City and Marquette.



It is possible to demonstrate a lesion in the lung roentgenographically long before the patient has any symptoms or anything that would lead him to consult a physician for treatment of a pulmonary condition.

Diagnosis of Rheumatic Heart Disease

Criteria and Procedures

By Hugh McCulloch, M.D.
Chicago, Illinois

THE DIAGNOSIS of rheumatic fever and rheumatic heart diseases remains a complex and difficult problem. The recent surge of interest in the disease has accentuated the problem because public health surveys and case finding programs have been carried out in many places to determine the incidence of the disease in a locality, the nature and variation of the disease in that locality and the location or some other epidemiologic characteristics. The first requirement, therefore, has been criteria of diagnosis and procedures to establish criteria. The place of rheumatic fever in the overall program of school health services has focussed attention also on the need of accurate means for identifying rheumatic subjects. Greater attention has been directed also toward recognizing cases in early stages in order to bring them under control and to prevent cardiac damage. This phase of the problem has required that cases of rheumatic fever be recognized which do not present characteristic clinical attacks and when the diagnosis is relatively hard. In any phase of the problem, for which the diagnosis is a part, accuracy becomes important so that case incidence can be estimated correctly and so that individuals may be labeled correctly as rheumatic subjects. Otherwise cases are missed and, what may be even more serious, individuals be needlessly subjected to treatment programs, disturbing and costly to patient, the family and to the community. It is the purpose of this paper to set forth what constitutes the rheumatic status, some of the criteria of diagnosis, and how these criteria can be subject to interpretation, and to discuss some of the diagnostic procedures and how they can be applied.

Rheumatic fever is a recurrent disease with attacks following in rapid succession or spread apart by long periods of remission, maybe years apart, or the disease can produce long chronic illness, waxing and waning in severity, but persistently present for months and even years with no period of remission. All diagnostic criteria apply equally to the recognition of the start of an attack, the degree of activity at any stage and to the end of an attack and disappearance of activity. They serve to measure the progress of the disease as well as to diagnose its presence.

Rheumatic fever and rheumatic heart disease are intimately related, and any and every attack of rheumatic fever, no matter what the manifestations of the attack may be, produce some pathologic change or alteration in cardiac structure but in diagnostic studies and procedures this relationship may be overlooked or minimized to a point of danger. The principal interest often is centered on the heart disease as in the case when physical examinations alone are used in case finding. The presence of evidence of cardiac damage then is made the main point of recognition, and no attempt is made to identify rheumatic fever or to learn about past attacks. If heart disease is the only recorded finding, many cases of rheumatic fever will be missed. When the interest is centered on rheumatic fever, many doubtful cases are included as positive from fear of missing cases that may result in heart disease later.

The etiologic relationship between rheumatic fever and streptococcal infection has been studied for a long time and the phase reaction of a rheumatic subject to infection is clear. The relationship is accepted at present as a tissue hypersensitivity phenomenon, though the mechanism is not demonstrated. Diagnostic procedures and criteria of activity of rheumatic fever may be confused with those set up for the recognition of streptococcal infection. It is necessary to evaluate criteria and the results of every procedure in terms of these two separate but related processes. At the present time it can be proposed that not every attack of rheumatic fever is related to streptococcal infection. Other factors, such as hormone dysfunction, emotional stress, fatigue and shock may be the inciting agent preceding and provoking an attack.

When the manifestations of rheumatic fever rise to and above the threshold of clinical recognition, the situation becomes a simple one and the diagnosis is easy. The subject becomes ill and in one way or another seeks advice and help and comes within the range of medical care. Each patient will show, under these conditions, a constellation of major and minor expressions[5] of the disease to be recognized and interpreted by the observer. The

From La Rabida Jackson Park Sanitarium, Chicago, Illinois.
Presented at the First Annual Meeting of the Michigan State Heart Association, Detroit, March 11, 1950.

major expressions are polyarthritis, carditis and chorea. Each of these expressions in the constellation must be considered separately and subjected to analysis. Each may be due to conditions other than rheumatic fever and the distinction between them may require help and time and retrospect.

Polyarthritis

Polyarthritis is the expression of rheumatic fever from which the disease derives part of its name. The equally descriptive term of "inflammatory rheumatism" has almost passed out of use but may be recalled to help differentiate rheumatic fever from other forms of rheumatism. Polyarthritis is recognized by objective signs in joint areas of redness, heat, local tenderness and loss of function from pain. Polyarthralgia is not a correct term for there is more than pain. These signs are conspicuous in young adults and older children, in the order given. They are usually inconspicuous and indefinite in reverse of the order given in younger children, particularly during first attacks. The four signs can be identified objectively in the history and one or more of them must be identified in a present attack. Subjective complaints without identified signs should never be accepted as criteria. The signs are usually confined closely to joint areas, though nearby muscle and tendon tenderness may be associated. Smaller joints of fingers and toes, hands and feet, wrists and ankles, elbows and knees are usually affected with the signs migrating from one location to another within a few days. Multiple or single joints may be involved and the signs are always reversible with no residual changes. The relief of polyarthritis from salicylate exhibition is well known and may be a diagnostic procedure. Salicylate may be withheld from young children, unless the pain is severe, in order to follow the course of the polyarthritis.

Rheumatic fever may be difficult to distinguish from rheumatoid arthritis; indeed, according to present-day concepts, there may be no differentiation. The relationship of rheumatoid arthritis, dermatomyositis, lupus erythematosus, periarteritis nodosa and other such diseases of the reticuloendothelial and collagenous tissues becomes closer and closer and characteristics of more than one condition may be present in one patient. Muscular trauma and strain may simulate polyarthritis. Fatigue, especially in younger children unable to recognize or express fatigue symptoms accurately may simulate polyarthritis. Subjective symptoms, not objective signs, of pains in the legs, especially at bedtime and relieved by massage and manipulation and called "growing pains" can be identified easily. New concepts of growth, especially the spurt of growth and metabolic adjustment during adolescence, may place a different interpretation on "growing pains." This is the symptom, and the finding of a so-called cardiac murmur, which leads to most mistaken diagnoses of rheumatic fever.

Occasionally other diseases may present symptoms simulating rheumatic fever. Of this group, three are important: poliomyelitis, leukemia and osteomyelitis.

Carditis

Carditis due to rheumatic fever can be suspected, even if not proven, in each case. It is more apt to occur in younger people and in sequential attacks. The cardiac lesion may be acute and reversible, probably is so in most cases and may be chronic and may be irreversible, strangely different from lesions of rheumatic fever in other organs and parts of the body. Pancarditis is possible and more frequent in younger people. It is made up of varying components of myocarditis, endocarditis and valvulitis, and pericarditis. It is the one important effect of rheumatic fever because it is the only one which can be irreversible. If a patient has an attack of rheumatic fever, the cardiac damage is the main problem which lies ahead.

The cardiac lesion can be recognized, if sufficient in quantity, by enlargement of the heart, alteration of the quality of the two cardiac sounds, particularly the first sound at the apex, and disturbances of mechanical co-ordinated function, the ability to move blood through the chambers of the heart and the peripheral areas of the body, and intrinsic disturbances of mechanism. Determination of these signs can be worked out on physical examination by procedures known to all.[6]

Associated with these changes, certain adventitious signs have been found to indicate cardiac lesions, notably thrills and murmurs due to changes in the caliber of the circulatory channel through the heart. These changes can occur from obstruction, constriction or projection within or into the channel, or from changes without, resulting from pressure or shift in position of the channel. Presystolic apical thrills are always significant of stenosis of the mitral valve with ad-

vanced heart disease. Other thrills are found infrequently in rheumatic heart disease. Great importance is often attached to cardiac murmurs; much confusion exists as to their interpretation[2,3,4] and many mistakes in diagnosis are based on over-emphasis on murmurs of no pathologic significance. Murmurs have intensity, duration, pitch, time in the cardiac cycle and a location on the chest wall. Terminology should be based on these primary qualities. Well-defined, apical, systolic murmurs are usually present in cases of rheumatic carditis and are associated with mitral valve insufficiency. Faint, mid or late diastolic apical murmurs due to mitral valvulitis and a failing heart are usually missed. Loud presystolic murmurs are called systolic in time and alterations of the first sound at the apex due to stenosis of the mitral valve are confused with other signs. Faint mid-diastolic murmurs heard best along the left sternal border, best heard in the upright position, are often missed because they are not listened for, or because they are overshadowed by other and louder sounds and murmurs. These are the four important cardiac murmurs of rheumatic carditis. Murmurs which do not fall into these four categories and with these qualities can be discarded or must be accepted with reserve until they are proven to be significant. An understanding of acoustics and the use of an electrophonocardiogram and experience will assist in one's own ability to classify cardiac murmurs. A persistent apical systolic murmur in the absence of other signs of cardiac damage, means no more than that valvular scarring has occurred from a previous carditis and as a sign means "Kilroy has been here."

Pericarditis can be recognized by friction rubs and fluid exudate. Rubs are missed often because they are not listened for or because the sign is transient or not present when the pericardial sac is distended with fluid exudate or is obliterated. They are easy to recognize and are best and most often heard along the left sternal border; they may be confused with cardiac murmurs. Friction rubs are more often heard than felt.

Carditis must be differentiated from congenital anomalies of the cardiovascular system. The character of the murmur is the confusing sign, though when there is chamber enlargement, the differential diagnosis can be difficult. Improved techniques of angiocardiography have made important contributions to an understanding of the physical signs. In most cases a diagnosis of the general nature of the cardiac lesion can be made.

There are no diseases which resemble rheumatic carditis.

Chorea

Chorea minor (encephalitis rheumatica) is recognized by disturbed motor and emotional patterns. The basic reflex pattern is altered and characteristic movements of face, extremities, speech and body position develop when the part goes into voluntary or semivoluntary action. Signs disappear during sleep, and are intensified by excitement or intention. There is involuntary muscular contracture but no convulsive disorder. Disturbances of emotional patterns likewise are usually present. These disturbances vary and lack a fixed pattern. The motor disturbance may be predominantly one-sided and is usually on the lesser dominant side. There are no sensory changes. The disease is always reversible with no residual change. Chorea may be caused by psychogenic disturbances such as, motor and emotional reactions in crossed cerebral dominance (strephosymbolia), hysteria and emotional stress.

Chorea may be confused with poliomyelitis and organic lesions of the CNS such as cerebral palsy and athetosis. It is confused most frequently with facial tics and habit spasms. The distinction should be easy to make since tics and habit spasms have a fixed pattern of expression at any one period, though the pattern of the spasm may change.

This is the picture of the rheumatic constellation in its clearest expression, the planets which have the greatest luminosity and visibility. They can be seen by the naked eye when one looks and when the constellation is above the horizon. Lesser planets, the minor expressions, are erythema, subcutaneous nodules, fever and lesions in other viscera.

Erythema marginatum is an exudative lesion and is similar to the arthritis and some of the anatomic lesions in the heart and body tissues. Its presence indicates activity of rheumatic fever and can be used as visual education to explain activity to patients when other signs are absent.

Rheumatic subcutaneous nodules, proliferative lesions found in tendon sheaths, aponeuroses and certain bony prominences, all poorly vascularized areas, are similar to the characteristic Aschoff nodule in cardiac muscle and are diagnostic of

rheumatic fever. They occur more frequently during periods of recovery and represent repair of tissue damage.

Fever is the expression of the disease from which rheumatic fever derives the other part of its name. It is present in some degree and at one time or another in every case. It is high in the acute attack, is higher in adults, and is difficult to estimate at other times. The fever curve has no characteristic diagnostic pattern and should never be the single criteria, taken alone, of rheumatic activity.

A discussion of associated lesions in lung, abdomen, kidney and maybe in other viscera is beyond the capacity of this paper. Both substantiating and differential diagnostic signs of them can be worked out. The situation is rarely difficult for such lesions occur only rarely without one or more of the three major expressions of rheumatic fever.

A group of symptoms and signs are often mentioned as being related to rheumatic fever such as abdominal pain, epistaxis, fainting, cardiac discomfort and heart consciousness. None of these are significant. These are asteroids, inside but not a part of the constellation. Abdominal pain may be due to rheumatic peritonitis or to rheumatic disease in the abdominal arteries, but is usually a behavior disturbance or a visceral reaction to acute tonsillitis or nasopharyngitis. Epistaxis in severe form occurs in rheumatic subjects with advanced activity, but is more often due to trauma or to increased vascularity and congestion of the nasal mucous membranes. Syncope and discomfort, usually palpitation, have no significance in the patient who complains of them. When the signs are present the patient has advanced degrees of carditis. These symptoms and signs are far removed from the constellation.

When the orbit of the constellation passes near or below the horizon and the patient passes into a period of remission, the situation is not simple and easy. Even with the telescope the planets are gone. One must wait until they reappear, hoping they never will, and taking care that everything is done to delay or prevent their reappearance. Maybe presumptive evidence can be seen in the horizon in the trail of the major planets when the focus is sharpened. Under such study and test periods evidence can be accumulated. If the sum total of this evidence is great enough it becomes more confirming than presumptive. The following procedures may be carried out to evaluate presumptive evidence.

1. Careful basal body temperature at selected times of the day when the temperature is apt to be the highest and lowest. The normal high should be 37.4°C, the range 1.0°C in the test period of at least five days.

2. Careful basal heart rate count to coincide with temperature readings, if possible a sleeping pulse rate to get the lowest rate. The normal high in young children should be 100/min., or less in older ones. Return of accelerated heart rate after effort to the previous resting rate within a reasonable time together with an estimate of the amount of work required to produce an unusual rise or a delayed return. Every subject has his own characteristic resting pulse rate and response to effort or emotion.

3. An estimate of nutritional status by weight curve and charts and by physical examination. Rheumatic fever is associated with a nutritional deficit obvious or obscure. A deficit is the one main characteristic of "below par," either below or above weight, children and does not often escape the careful observer. Metabolic studies may occasionally be necessary to show all the changes in deficits and negative balances.

4. Rheumatic fevers injures the blood-forming structures and anemia is a constant feature during sustained periods of activity. It is more than can be explained by nutritional deficit of iron and protein. It may be the cause of dyspnea rather than cardiac failure or salicylate intoxication. Sickle-cell anemia can simulate rheumatic fever closely and every Negro patient suspect must have moist droplet blood examination.

5. The hemogram usually is not disturbed though young adults may show a shift to the left and the total neutrophil count may be high during acute attacks. No statement can be made at present about the reliability of total eosinophilia as an index of rheumatic activity. The total count may rise and fall and may be modified by steriod compounds and the mechanism of eosinophil production may be more sensitive in the rheumatic subject. Increase of the ESR is an index of activity of some form of infection. A single determination showing an increase is presumptive evidence in a rheumatic patient suspect. Serial determination showing a sustained increase is confirming but active infection elsewhere and otherwise may be the cause.

6. Roentgencardiograms, electrocardiograms and electrophonocardiograms made under standard conditions reveal information which is invaluable and which cannot be obtained elsewhere or otherwise. Again, evidence on a single examination may be only presumptive; on serial examination it is confirming. Alterations in cardiac size and shape, change in point of origin, conduction time and distributions of the cardiac impulse, alterations of the QRS complex, and disturbances of mechanism, particularly the finding of ectopic foci of control or origin of cardiac impulse can be determined and can be recorded graphically. These procedures must be made in conjunction with careful, searching, thoughtful physical examination. Changes in these findings are for better or for worse, a *status quo* is hopeful. Back of them all is the intelligence and experience of the examiner, who puts each in its proper place, or in the discard.

When careful search reveals no positive sign or group of signs the testing should be discontinued. When symptoms reappear, if they do, the testing can be carried out again and again if necessary.

Experience shows that certain secondary factors are associated with a higher incidence of rheumatic activity and it is in these areas that surveys are productive of accurate testing and a greater yield of cases. Accumulation of symptoms and signs from the anamnesis is notoriously unreliable. When certified by medical examination and recorded, they become permanent in the record. The conditions and events under which rheumatic fever occurs more frequently or more severely are: in the spring season; in physically and emotionally "below par" children[1]; in population areas of low economic and social security; in siblings of a known patient; in families with low health standards and habits. First attacks occur more frequently in age five to nine year semidecade. Recurrent attacks are associated with a rise in incidence of heart disease. Chronic heart disease occurs most frequently in age ten to fourteen year semidecade. Rheumatic fever at six, rheumatic heart disease at sixteen years of age should point the emphasis in the study. Geographically, the frequency distribution of rheumatic fever is related directly to streptococcal infection. It occurs as Phase III following streptococcal infections and re-examination of patients a fortnight after acute hemolytic streptococcal infection will produce a high yield of cases.

The nature of rheumatic fever has been confused further since the observation that steroid compounds, notably cortisone and ACTH (Armour), affects profoundly the course of rheumatic fever. This suggests that factors other than streptococcal infection may operate to render an individual subject to rheumatic fever or to initiate and activate rheumatic fever attacks. The information immediately available does not indicate whether the effect is on the host or on the disease mechanism. The use of these substances alters profoundly the subject and there is suggestive evidence that the rheumatic subject has a mechanism which is more sensitive than the normal subject. If this hypothesis becomes established as fact, many more diagnostic criteria will be required to identify the rheumatic subject and to evaluate the degree of activity of rheumatic fever. No final statement of this possibility can be made now.

Emphasis has been placed more and more, probably too much, on information derived from laboratory tests and procedures. These are all helpful and suggestive. They may be presumptive or confirming. Eventually, one, a polar star, which is specific, will be worked out. For example, the finding of tubercle bacilli in the sputum, a high sugar content of blood and urine or blast cells in the marrow or circulating blood are each confirming and positive diagnoses of the conditions they represent. But the final word should be said on experience and judgment which should be based on accumulation of all information, fully evaluated and applied to the individual situation. Unless the criteria are positive it is imperative that the situation be held in abeyance and under observation and that the individual receive no stigma of a false diagnosis. No diagnosis should be presumptive. If the signs are positive, it should be "yes"; otherwise, no diagnosis.

Summary

The problem of diagnosis of rheumatic fever and the management of patients will remain a large one. It should rest in the hands of the family physician, the general practitioner and the pediatrician, who is mostly a general practitioner. The over-all direction of programs of care and follow-up will require the specialized services and advice of the specialist who may be needed in a few doubtful cases for diagnosis.

If the problem must rest in the hands of the family physician he must be willing to take time

(Continued on Page 1433)

Diagnosis of the Acute Rheumatic State

By Saul Rosenzweig, M.D.
Detroit, Michigan

ALTHOUGH rheumatic fever is protean in its manifestations and ubiquitous in its visceral distribution, it has no clear-cut common denominator for its diagnosis. It may be as simple at times to diagnose as the case of the full-blown herpes zoster, or as difficult to diagnose as the pea-sized primary carcinoma of the prostate that the pathologist finally shows us. There is no pathognomonic sign such as the acute flaccid paralysis of poliomyelitis to point the diagnostic way; there is no definite tell-tale historical note of colicky pain to suggest calculus; there is no diagnostic laboratory test like the Wassermann, or the classic x-ray of pulmonary tuberculosis, or the exact electrocardiographic pattern of myocardial infarction. So to make the diagnosis of the acute rheumatic state all the data of history, examination, laboratory approaches, even heredity, must be evaluated. This suggests, and it is true, that a full knowledge of the variants of this disease must be known to arrive at a diagnosis; indeed one may speculate whether rheumatic fever is a disease at all, for in recent years it has been shown by Arnold Rich, Kerr and others that a more or less common pathological denominator designates all the collagen diseases, of which rheumatic fever is perhaps the most common clinical syndrome. This explains readily the overlapping, for instance, of rheumatic fever, Still's disease and lupus erythematosus disseminatus.

But we clinicians must leave this speculation to the researchers in pure science when we have a patient whom we suspect suffers from acute rheumatic fever. Diagnosis is of the utmost importance in the *active* stage as the probable benefits of therapy depend on it, for it is well accepted that it is during the *active* stage of this disease that the myocardium and endocardium receive their severest injury and only months or years later be recognized as the full blown valvular heart disease. It is not within the province of this paper to meditate on why, although any or all organs may be initially involved in the rheumatic infection, only the cardiac apparatus receives a more or less permanent damage, but it is on its multiple organ manifestations that aid can be derived as to diagnosis. The acute phase of rheumatic fever has been described as (1) *monocyclic* or, (2) *polycyclic,* with (3) an uncommon *continuous* form: it is often thought that adults commonly have an acute monocyclic form while children have the polycyclic form; this is a generalization that I am not prepared to accept, for the more one follows these cases the move evidence there is that almost all cases have a chronic active or latent stage. This latter assumption perhaps accounts for so much failure in handling this disease even with thorough-going care; this also accounts for the fact that more exacerbations which climb over the clinical horizon occur primarily in the first few years after the initial active episode.

In arriving at a diagnostic conclusion in acute rheumatic fever it is well known that certain manifestations are more significant than others. Thus, it is common to divide the clinical evidences into (1) *major* or perhaps *presumptive* evidence, and (2) *minor* or *possible* evidence. The following might be such a grouping:

Major Manifestations.—(1) *Migratory* arthropathy, (2) carditis, (3) chorea, (4) subcutaneous fibroid nodules, (5) characteristic electrocardiographic findings, (6) minor evidence in an established rheumatic valvular heart, (7) therapeutic test.

Minor Manifestations.—(1) Fever—as sole evidence of disease, (2) skin rashes, other than nodules, (3) tachycardia, (4) precordial pains, abdominal pain, (5) epistaxis, nasal—less so renal (6) pneumonitis, pleuritis (debatable), (7) growing pains (debatable), (8) erythrocyte sedimentation rate, (9) antistreptolysin—0 titer.

This list seems, and is, quite a formidable one, yet it is well known that in spite of it many cases may be so mild or masquerade as other conditions that both parent and physician may with painstaking intent still miss the diagnosis.

Arthritis.—The typical joint involvement has been described as acute, migratory, hot, red, possibly swollen, and painful. This type is exceedingly rare nowadays, and a much milder form of arthropathy is usually encountered. Sometimes one merely finds an aching, slightly stiff joint;

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at times a child can't run as hard as usual and complains of limp or indefinite pain and examination reveals none of the mentioned classical criteria of arthritis. Growing pains probably belong in this mild form, usually occurring behind the knees. Nonrheumatic growing pains usually occur at night. Most of the terror in mothers of rheumatic fever is due to the too widespread feeling that painful limbs and heart disease are practically synonymous. While it is wise to make a careful review of such mild suspect cases it is equally wise to do our utmost to prevent this mass cardiac neurosis that we, press and radio may cause. It is also well to remember that rheumatic fever without any recognizable joint manifestations is quite common especially in children, in perhaps *fifteen* or more per cent. It is of great help in evaluating any joint manifestation to recall that the rheumatic joint involvement usually follows an upper respiratory infection or other infections with certain types of streptococci —Lancefield A. The more common joints involved are the larger ones of the extremities but smaller joints are not immune; involution in some days or weeks occurs without residual—unlike as mentioned—the heart. This cycle may recur and become the socalled continuous form.

Fluid aspirated from the joints is sterile but is turbid with many leukocytes. Usually the severer forms of arthritis are seen in adolescents or adults rather than children where the carditis is more severe; but probably no rule in medicine is more frequently broken than this one.

Carditis.—This is a very useful term, but it actually means a *pancarditis.* The disease may devastate any or all of the three layers: pericardium, myocardium, and endocardium, but practically always disproportionately. Probably all acute rheumatic fever is associated with active carditis; this is especially true of children, the older the patient the less evidence of severe involvement is found; however, since adults with mild cases do not die, pathologic proof of involvement is not proven. The subjective evidence of carditis is usually meager; only an occasional case will complain of dyspnea, palpitation; possibly slightly more frequently one notes precordial pain; a rare acute carditis will fulminate into congestive failure and the symptoms of failure will ensue. Fever frequently is found as an evidence of active carditis.

Myocarditis.—Although involvement of the endocardium is so frequently recognized by the tell-tale murmurs and in later stages of the rheumatic state bears the brunt of the disease, however early in the disease it is the myocardium that is the more importantly involved. This is seen in the loss of reserve noted in the acute attack while reserve greatly improves with subsidence of the bout, even with persistence of a valvular defect. It is therefore accepted widely that frank congestive failure in young rheumatics *cannot* occur without *active* or acute myocarditis. It is because of this fact that the child with rheumatic heart disease should fear the acute respiratory infection heralding exacerbation more than e.g., playing football. Probably the tachycardia which is out of proportion to the fever encountered is due to myocardial involvement; the more serious forms of arrhythmia such as auricular fibrillation are also an index to gravity of myocardial involvement. Impaired heart tones; newly appearing third heart tone, gallop rhythm are also evidence of myocardial involvement. Changes in size of the heart by x-ray are also most likely a mirror of myocardial involvement. Ease of fatigue in the absence of other causes can also be blamed on the impaired myocardium in a rheumatic suspect.

Pericarditis.—This involvement to a recognizable clinical degree is not common in adults but frequent in the severer involvement of the heart in children. However there is some evidence (by Samuel Levine) that if the disease burns itself out with pericarditis as the major manifestation there may be some sparing or less grave involvement of valves. The evidence of pericarditis is the rapid, and at times characteristic x-ray enlargement of the heart shadow—the so-called water-bottle shaped heart; the electrocardiograph also is of considerable though not uniform aid; briefly these signs are decrease in voltage of the ventricular segments, and non-reciprocal elevation of the RS complex; frequently the T wave may become low, dome shaped or inverted. The diagnosis is best established by the hearing of the friction rub; this is the biphasic loud, superficial "double-shuffle" sound. The sound may be so loud as to obscure totally the heart tones, while in the large effusions the peculiarly distant tones make the suspicion of the pericarditis likely. In rheumatic pericarditis the friction usu-

ally is heard even with large effusion, in which case it is best heard at the base where the pericardium reduplicates itself over the great vessels. Ewart's sign (dullness and tubular breathing at the angle of the left scapula) is encountered in large pericardial effusions.

Valvulitis and *Endocarditis.*—The valves are oftener disproportionately involved than the mural endocardium and the left side of the heart more so than the right and the mitral more than the aortic valve. The murmurs that arise from the acute involvement of these valves usually persist as valvular heart disease but occasionally they may disappear, especially in acute aortic insufficiency. A transient diastolic murmur may at times also be found in acute cases at the mitral area due to dilation of the auricle and ventricle with "relative stenosis" of the less dilatable mitral annulus. True stenosis, the proliferative lesion, probably develops only after many months or years, with probably a minimum of three-four years. Although these acute murmurs are mentioned here as evidence of valvulitis it is of course clear that myocardial involvement also plays a pertinent part in their production. The commonest murmur of acute carditis is soft, systolic in time, and apical in location. On the other hand this murmur is heard in almost any acute illness or commonly even without any illness in children. It is upon this rock that the diagnosis of acute rheumatic fever very often founders; so it can be categorically stated that this murmur should never be the sole criteria of rheumatic fever without other better evidences of the disease. An associated thrill would be of aid in evaluating a systolic murmur, but this practically never is found in acute rheumatism. The functional systolic murmur is often basal, related to phases of respiration, exercise, position. A good rule if not too rigidly adhered to might be, that the diastolic murmur always means severe organic involvement, while the soft systolic murmur always is functional if without corroborative evidence.

Chorea.—When this is the sole evidence of the acute rheumatic state there is some uncertainty whether it is a true rheumatic manifestation. The age incidence i.e., almost always before pubescence; the absence of fever, or an acceptable pathology; the large number of girls, 5:1; the psychiatric relationship, normal EKG, normal sedimentation rate, and above all the relatively rare development of late valvular disease—only two per cent—lend some weight to this argument. In spite of such intriguing differences it is nevertheless true that chorea is more frequently associated with other major manifestations of rehumatic fever.

The onset of chorea may be insidious (the rule) or acute, especially after emotional stress. The typical choreic movement is purposeless, unco-ordinated, it is brief, nonsustained, irregular, nonsymmetric. Smaller muscle groups are most involved such as toes, fingers, lips, etc.; however, if the condition progresses larger muscle groups may be involved, so there may be ataxia, stumbling, et cetera. Intention or excitement increases the purposeless activity, but sleep stops the movements. Weakness often develops in such muscle groups and pseudo-plegias may be noted, the socalled "chorea sine chorea." Choreic patients may have disturbances in mental state, with irritability of various degree up to acute mania.

There are several signs which aid in diagnosing the choreic movements:

1. The pronator sign, in which the palms are pronated on extending arms over the head.
2. The choreic handclasp in which there is rapid maximal contraction with equally rapid relaxation with alteration of tone during this action.
3. The "choreic hand" often shows flexion of the wrist with extension of the fingers.

In the fully developed choreic the movements need no especially diagnostic skill, however tics in impressionable girls may be differentiated by such tests; moreover in the tic or habit spasm the one or two movements are constantly repetitive. However, some choreics develop tics themselves—a baffling combination. Athetosis can readily be differentiated by its worm or snake-like, slow, twisting character of the movement.

Subcutaneous Nodules.—Although the presence of nodules is a major evidence of the disease, there is a marked variability in the expected incidence, there being an involvement in from 2 to 75 per cent of cases from year to year and from location to location. However, when found they seem to be a quantitative evidence of grave involvement, but not necessarily a sign of grave ultimate prognosis. They are much oftener seen in children than adults. Nodules are subcutaneous, pea to

bean sized, painless, freely moveable, often in crops, usually last weeks to months, involute without residue. They are found about the malleoli, the patella, elbows, on the extensor endons of the hands, in the scalp, or along the spinal column. Pathologically nodules indicate the proliferative rather the exudative aspect of the disease and thus are of themselves indicative of the subacute but active stage of the disease. Nodules also are found in rheumatoid arthritis with equal frequency to rheumatic fever, so (unless one considers these two conditions variants of the same disease process) we must look for other criteria of the one or the other, as in both conditions from clinical and histological aspects they are strikingly similar. Although nodules are seen in many other conditions, such as sarcoid, erythema nodosum, erythema induratum, Heberdens node of osteoarthritis, Von Recklinghausens disease, lupus vulgaris and erythematosus, and lues, in none of these is the nodule at all possible to be confused with the rheumatic nodule, once having been seen and felt.

The Electrocardiograph.—This is a most useful adjunct to the study of the rheumatic state. The graph can give much information not only in diagnosis, but also in progress of the disease, its pathology and even the ultimate prognosis. But it is not all things to all men, nor should it be expected to blanket the field. We have found as well as many others that all the changes formerly considered almost pathognomonic for rheumatic fever are encountered in many acute diseases, infective and degenerative both in childhood and in adults. In children, for example, anemias, poliomyelitis, bronchiolitis, pancreatitic fibrosis, all of the collagen diseases, etc., can show EKG patterns similar to those of rheumatic fever, at times with the same frequency. The experience with diseases in adults is similar; typhoid fever, acute nephritis, pneumonia, are examples. In truth probably all pathologic states if severe enough to impair the myocardial oxygen consumption will give abnormal patterns at times similar to those of rheumatic fever. I should say that probably the sins of commission are greater than those of omission, i.e., that we have become more dependent on this test than warranted; for example, a negative or normal graph can never be the sine qua non to exclude a diagnosis of rheumatic fever. A single normal tracing is much worse than having no tracing at all if one is prone to lean on this recd. So it is our practice to take frequent graphs, usually every week, or more frequently, as serial graphs are infinitely more helpful than the single tracing for the determination of acute carditis.

Our order of significance of abnormalities in the electrocardiogram is:

1. Serial changes in conformation of the various complexes: P, QRS, R, T.
2. Prolongation of the atrioventricular conduction time (PR time).
3. Prolongation of the ventricular conduction time (QT time).
4. Gross abnormalities of rhythm.
5. Abnormalities due to pericarditis.
6. Minor changes: Tachycardia, absence of normal sinus arrhythmia in children, et cetera.

1. *Serial Complex Changes.*—If frequent graphs are taken the large majority, probably over eighty-five per cent of cases, of rheumatic fever will show changes that in a single tracing might be termed normal, while serial changes are definite evidence of an impaired myocardial state or carditis. It is a well known fact that for a given individual from day to day his tracing will show little or no variation with a constant rate, same technique and same external conditions of heat, respiratory state, etc. In this regard in the normal subject serial graphs may be as fixed a part of the personal makeup as his finger prints. In acute rheumatism the auricular complex, the P wave, may show broadening, or flattening; the bifid P wave is rather unusual in the acute state, more often being seen in chronic valvular disease with auricular hypertrophy. Inversion of the P wave usually means an ectopic auricular focus of primary excitation. Serial alterations in form and direction of the QRS are frequently found if searched for. RST segment displacement up or down is occasionally seen even in the absence of pericarditis or excessive tachycardia. Abnormalities in the T wave are probably the most frequent serial change in rheumatic fever, just as it is most sensitive to change in other conditions that alter the EKG pattern. The T, especially in lead one and two, may be altered in shape, even beaked, but alterations in voltage are more frequent, so the height of the T_{1-2} should be watched carefully; flattening or inversion occur

often in severe rheumatics; and return to a normal, fixed shape and height of T can be used as a gauge of improvement. It may be said that possibly the chest leads in children, since their normal variation is so marked, add little to the data derived from the conventional leads.

2. *Prolonged PR Time.*—This is classically the most significant abnormality found in acute rheumatic fever. However in the single tracing it is found in only fifteen per cent or less of children and less frequently in adults. The normal PR time varies greatly with age, the younger the shorter the time. In the lower school age child, .16^{sec} probably is maximal. The maximum for the high school child is about .18^{sec} and for the adult, .20^{sec}. With these as standards serial prolongations or even progressive lengthening of the interval within the normal limit is significant. Moreover a slight progressive increase in PR in the presence of a more rapid rate is of more note than a fixed high normal time. PR prolongation is not usually permanent and thus may be used as a guide to improving carditis; as a rule, though, the improvement precedes other evidence of active carditic involution; occasionally however the delay may last for months, and rarely be permanent. Higher degrees of heart block are not frequent although severe cases may show 4:1, 5:1 block. I have seen Wenchebach's type of heart block only two or three times in the course of rheumatic fever. I have never seen complete dissociation in uncomplicated rheumatic fever; when found it is usually due to the use of digitalis in the disease or in old rheumatic heart disease. PR delay of course is found in many other conditions, such as acute nephritis, degenerations of advancing age, subacute bacterial endocarditis, diphtheria, etc. Whether PR delay represents a quantitative estimation of the severity of the carditis is debatable; certainly it is a measure of diffuse myocardial involvement; however all are agreed that in most cases even with high grade block is it not a bad prognostic index for the late or distant effect on the heart, except in the uncommon permanent case of A-V delay.

3. *Prolonged QT Interval.*—Prolongation of ventricular systolic time according to L. Taran either absolute or corrected (QTc) occurs in ninety per cent of cases of rheumatic fever in the stage of acute invasion with carditis and according to him is a "function of the severity of involvement and not of the rate and thus can be used as an index of the activity of the carditis." In our experience we have not noted so high a percentage deviation from the normal.

4. *Gross Abnormalities of Rhythm.*—These are not a frequent finding. There is some quantitation between the graver forms of arrhythmia and severity of carditis. Auricular fibrillation is occasionally seen in the first bout of rheumatic fever but oftener it is seen in exacerbations of the disease in an already injured heart. When it occurs in the primary episode fibrillation is usually paroxysmal and transient, in the later old cases often persistent. Nodal rhythm, auricular flutter and paroxysmal tachycardia are less frequently encountered in the acute rheumatic state, the latter two when found are usually in adults with already damaged hearts, while nodal rhythm is not too rare in children without carditis.

5. *Pericarditic Changes.*—These have already been mentioned in discussion of pericarditis.

6. *Minor Electrocardiographic Deviations.*—These usually need no electrocardiograph for their discovery. The EKG merely, for instance, gives one a permanent record of the degree of tachycardia. The cessation of the normal sinus arrhythmia in children can also be readily ascertained clinically, but in the presence of tachycardia it may be difficult. The graphic demonstration of the return of sinus arrhythmia is of some value in determination of an improving myocardium.

Extrasystoles are not rare in rheumatic fever, but are neither of diagnostic nor prognostic import. The types seen are auricular the commonest, less so ventricular; occasionally an interpolated one is seen. Sinoauricular arrest, with or without ventricular escape has been noted by us occasionally. Ectopic pacemaker is also seen rarely but I believe is of no significance in evaluation of this disease. Intraventricular delay, transient, is also a rare finding, but probably is of more than minor significance.

Minor Evidence in a Known Valvular Heart.—This seems to be a fair conclusion of diagnostic significance. The emphasis in a known cardiac is obviously in favor of evaluating any evidence as

of more than passing moment as rheumatic fever is so prone to be recurrent, repetitive, or latently continuously active. It may be put otherwise, that one with a normal background should not be diagnosed as active rheumatic fever without major evidence, while the known rheumatic valvular heart case should be considered as reactivated on minor criteria.

Therapeutic Test.—It is often impossible to arrive at a diagnosis in a suspected case as all the previously mentioned major criteria may be absent or equivocal. One or more of the minor criteria may be present but so many other illnesses have such evidence that diagnosis is extremely hazardous. It is this case especially in the acute exudative phase early in the disease that the exhibition of the specific salicylates in adequate dosage may give a dramatic involution of signs, symptoms and laboratory tests, that the inference of the acute rheumatic state is warranted. A quantitative corollary of the therapeutic test perhaps can be obtained by an estimation of the mucopolysaccharide of the cement substance of connective tissue hyaluronic acid. Salicylates it is known inhibit the spreading reaction of hyaluronidase, the enzyme acting on hyaluronic acid. This action of salicylates on this system of enzymes is intriguing but not fully proven. It certainly can't be stated that the anti-rheumatic effect of salicylates is *solely* due to the inhibition of hyaluronidase, as other enzyme systems are likely to be involved.

Minor Manifestations of Acute Rheumatic Fever

The less dependable criteria of the acute rheumatic state are almost legion. I have listed some of the more likely. On very shaky ground are such other conditions as torticollis, iritis, urticaria, even schizophrenia. Certainly when no other evidence is present these are not sufficient to diagnose rheumatic fever. Anemia of a secondary type is not per se an evidence of the disease but a sequela and probably a guide to the severity of the infection. Upper respiratory infection, too, is not rheumatic but more than likely the trigger that sets off the gunshot—the acute rheumatic bout.

Fever.—This sign in an otherwise "healthy" child or young adult is probably the most difficult to assess, for it is true that a considerable number of these will eventually show other evidences of the disease. High grade fever is never subjectively and objectively otherwise negative; with thorough search these hyperpyrexias of 104 and 105 will quickly yield to a correct diagnostic inference. It is the low grade fever of 100-101 or 102 which creates the great diagnostic problem. The temperature should in these cases, be taken per oram and per rectum; it should be borne in mind too that the usual diurnal swing is not a rigid set of normals. If the temperature by both orifices is the same, say 100, the rectal temperature is more likely to be correct and normal. Thomas Cooley used to say that this case "can best be diagnosed and cured by breaking or losing the thermometer." So it is fair to state that fever alone is not a diagnostic sign of the disease, however as a sign of continued activity it is probably the commonest.

Skin Rashes.—There are numerous skin manifestations in the acute rheumatic state, the previously mentioned fibroid nodule being by far the most significant. Commoner however is erythema multiforme and erythema marginatum, Abt's Dermatitis. This is usually pale, or faun colored, widespread on the trunk, confluent, often transient, and often recurrent, occurs both in acute and chronic rheumatism. Although it is reported that erythema marginatum may be the sole manifestation of the disease I consider it extremely hazardous to diagnose acute rheumatic fever on this sign alone; however in this case time is on the side of the examiner and other evidence will appear if the search is sedulous.

Purpura.—The so-called purpura rheumatica is well known; it is a symptomatic type of purpura and usually when found is in the graver type of acute rheumatism. Urticaria has been mentioned. Erythema nodosum as an entity is readily diagnosed but its etiology is likely to be tuberculous or due to other infections, as well as occasionally a manifestation of rheumatic fever.

Tachycardia.—As the sole evidence of acute rheumatic fever this certainly is a weak reed. Even what is a normal pulse rate is a great variable. The sleeping pulse is most valuable, as most children and even adults have a moderate or marked quickening of the pulse on the approach of the physician who is epitomized as "that man with the needle is here again." However if the pulse is rapid and irregular it *is* of significance and if the arrhythmia is not well told by examination the electrocardiograph will be of diagnostic aid. Even

in the absence of other criteria the young fibrillator is likely to be rheumatic, though usually of the chronic type.

Pain—Precordial, Abdominal.—Precordial pain in children is more significant than in young adults where "effort syndrome" is the more common etiology. This anginoid syndrome of rheumatic fever is relatively rare but when present indicates a severe episode of the disease; various authors have shown a coronary arteritis in rheumatic fever which readily explains the pain; in wide open aortic insufficiency there is often angina too but here it is not an arteritis but impairment mechanically of coronary flow. The epicarditis with pericarditis frequently causes angina but here the friction sound is of great aid. Abdominal pain may cause confusion in diagnosis; a mild serous peritonitis is found rarely in rheumatic fever; if diaphragmatic it may be told by its distribution, perhaps by a friction sound; however if localized to the lower abdomen appendicitis has been diagnosed; if this is borne in mind an occasional laparotomy may be avoided.

Pneumonitis, Pleuritis.—Since rheumatic fever is entirely a vascular disease, true pneumonitis is unlikely. But arteritis with hemorrhage and the consequent pseudoconsolidation does occur and may be recognized clinically as a pneumonitis. When found however other evidences of acute rheumatism are often found. I agree that this stand is sitting on top of the fence but that is where I prefer to stay—precarious as it is. Moreover it should not be forgotten that true pneumonia as a complication or sequela of grave illness can be found following rheumatic fever as well as any other acute illness. Pleuritis does occur however and perhaps is an extension from pericarditis, or like pericarditis or peritonitis a separate evidence of serous sac involvement.

Growing Pains.—This sign of acute rheumatic fever has been mentioned above under the arthritis of rheumatic fever.

Epistaxis.—Although not an important criteria of acute rheumatic fever it is true that non traumatic nasal epistaxis is commonly associated with the acute state. It has also been noted to herald a recrudescence as well as being an evidence of continued activity of the disease; microscopic renal epistaxis bears a similar relation to the disease. Pathologically these signs probably represent another evidence of the vascular nature of the disease.

The Antistreptolysin-O Titer.—The reaction in acute rheumatic fever to the hemolytic streptococcus agglutination test is uniformly negative but the antistreptolysin-O titer is high in ninety per cent of cases. In the atypical or smouldering case the antistreptolysin-O titer can thus provide additional diagnostic aid.

The sedimentation rate may better be mentioned later as an evidence of continued activity rather than diagnosis.

The Inactive Rheumatic State

Having arrived at a diagnosis and having accomplished a more or less successful therapeutic result of the acute phase the question that arises next is, what in this insidious disease are the criteria to warrant instituting convalescent care? If we accept the pathologist's data that rheumatic fever is never cured we can obviously be at once stymied for many pathologists have shown in painstaking search of chronic as well as acute rheumatic fever that post-mortem material almost uniformly has underlying *active* infection. Paul White puts this situation thus: "how can we determine with certainty the presence or absence of activity of the rheumatic infection during life," with his answer being in the negative.

This is the same dilemma as in tuberculosis where no cure can be vouched for, but the students of this disease like us have made a modus vivendi between the pathologist and the clinician. So, when we list the criteria of activity or inactivity of the rheumatic state one really means the criteria of *sufficient inactivity* of the disease process to warrant with the least risk the institution of increasing increments of physicial stress by the patient.

In the previous discussion of the diagnostic criteria much can be used also as evidence of continued activity. To avoid redundancy and to make a formula of attack of the problem as obvious as possible we can omit the clear evidence of acute activity, such as febrile arthritis, pericarditis, chorea, and the like signs, and consider only the case for latent activity.

The following, then, is my list of criteria which must be *totally* satisfied to institute convalescent care.

All these must be absent:

Evidence of Latent Activity.—(1) Patient has symptoms, (2) subcutaneous nodules, rarely erythemas, (3) tachycardia, (4) changing murmur, (5) changing size of heart, especially on x-ray, (6) elevated sedimentation rate, (7) abnormal blood count, (8) abnormal EKG, (9) minor signs: weight, exercise tolerance, urinary changes, vital capacity.

This formula for proof of activity need not be elaborated upon *in extenso*. Moreover even with a comprehensive rule of thumb there are frequently found cases where clinical acumen and long continued observation are even more important. The first criteria: the symptomatic child—is as elastic as the examiner's interpretation; in this group may be mentioned "pains and aches" not classically of the migratory arthritis type; precordial distress; another such symptom is easy fatigability, both physical and probably mental. Frequent nontraumatic nasal epistaxis occasionally is a symptom of latent activity of the disease.

The presence of subcutaneous nodules is one of the most important signs of continued rheumatic activity in the proliferative rather than the exudative stage of the disease. Unfortunately, as previously mentioned they are not uniformly, nor even to a predictable degree, present. *No* patient with nodules should have active convalescent care instituted. Erythema is a much less dependable evidence of latent activity as often erythema marginatum occurs in the rather acute stage of the disease, although occasionally erythema is found associated with nodules.

Since the heart bears the brunt of the damage inflicted by the rheumatic infection the cardiac apparatus should be most carefully and directly watched for evidence of continued active carditis of clinical or subclinical degree. Tachycardia, changing murmurs and changing size of the heart are three such significant signs. Afebrile tachycardia, especially in sleep, out of proportion to the clinical state, although weak evidence of latent activity, should nevertheless be suspect; rapid arrhythmias are more significant. The heart should frequently be observed as to evaluation of the usually concomitant murmurs. The functional murmur being excluded, changes in intensity of the murmur, degree of reference, the appearance early of diastolic murmurs either in mitral or aortic areas are all significant of continued active carditis. The heart often enlarges early in the invasion of the disease but gross arrhythmias or congestive failure may do the same; all are due to active infection. Thus the cardiac silhouette should be carefully observed by x-ray at intervals of one to two weeks when indicated, and we feel that both increases and decreases in cardiac diameters are evidence of activity and we should wait for a fixed x-ray cardiac area before instituting active convalescence.

The laboratory offers us considerable aid in differentiating the active from the latent rheumatic state. Some data are not uniformly present nor dependable; in this category is the blood count; in the acute exudative phase of the disease leukocytosis is usual but we feel this sign clears much earlier than other evidence of continued activity, on the other hand it may herald a recrudescence. Anemia is a poor sign of activity as it occurs in both the acute and the late latent stages of the disease; it is more an index of severity of involvement than a sign of continued activity. The erythrocyte sedimentation rate is probably the most uniformly helpful laboratory aid to estimation of continued activity of the disease. As long as the test is nonspecific and is found elevated in many conditions, degenerative, toxic and infectious, these must be excluded in each rheumatic. Occasionally a case, all other stigmata of activity being absent, shows a fixed high sedimentation rate; in this rare instance of isolated fixed high rates the test loses its value and other evidences of activity must be made the criteria of initiating active convalescent care. The sedimentation rate need not be done more frequently than every two weeks; significant changes will not occur more rapidly in rheumatic fever.

During the acute phase of the illness, urinary changes are expected and often found but insignificant findings are the rule later in the disease and certainly of insufficient import as a guide to continued activity.

The value of the electrocardiograph in diagnosis of the disease is just as significant in evaluation of activity but as mentioned before serial graphs offer much greater aid than a single tracing (85 to 95 per cent). Although some of the findings (PR delay) may be due to vagotonia and so, diminished or obviated by atropin, this does not negate the significance of the finding. We expect the electrocardiogram to return to normal or in rare

instances stay fixed in an abnormal state before inferring that convalescent care may be started. In the presence of an abnormal graph more frequent curves are warranted than sed. rate estimation, as changes occur much more rapidly, sometimes from hour to hour.

Among minor aids in evaluating activity is the weight chart. Usually, the acute rheumatic will be or become underweight. Failure to gain often corroborates other evidence of activity and conversely steady gain suggests diminution at least of the activity of the disease. In the overweight child or adult this is an undependable aid. Fatigability is also of minor aid; vital capacity may be a measure of this sign of activity, but it is of more value as evidence of beginning of loss of reserve, which of course is also evidence of activity.

Regardless of the formula we have for evaluation of activity of the disease, we can stress again that the completely asymptomatic, apparently quiescent case by all methods of objective evaluation may continue to progress insidiously, or even subclinical recurrences may occur without being found or suspected by the patient, parent or physician.

Differential Diagnosis of Acute Rheumatic Fever

Since the diagnosis of rheumatic fever itself may be very tenuous, the number of conditions from which it must be differentiated is a formidable one, and on the other hand rheumatic infection in childhood is more often overlooked than confounded with other diseases. Continued and careful observation will usually solve the problem. Several arthropathies, cardiac lesions and a larger group of more general conditions can be considered in the differential diagnosis.

Arthritic Conditions.—Tuberculous arthritis, syphilitic bone or joint disease, gonococcic arthritis, pyoarthrosis, acute osteomyelitis, scurvy.

Cardiovascular Conditions.—Subacute bacterial endocarditis, collagen diseases, hyperthyroidism, congenital cardiac defects, functional murmur, neurocirculatory asthenia.

Other Conditions.—Typhoid fever, poliomyelitis, meningococcic meningitis, brucellosis, sickle cell anemia, leukemia, bacillary dysentery, acute appendicitis, non-rheumatic choreas.

Arthritic Conditions.—Of the various types of specific infectious arthritis gonorrheal arthritis offers some difficulty, at times resembling closely both rheumatic fever and rheumatoid arthritis; the most important diagnostic features of this condition will usually clarify the problem; these are history of urethritis or cervicitis, demonstration of the organism from uro-genital tract or on culture from the suspected joint, positive complement fixation test and finally dramatic recovery on chemotherapy or penicillin with disappointing benefit from salicylates. Among all the other joint conditions mentioned, the course or recovery of a specific organism and above all a helpful x-ray will differentiate the pyoarthrosis, syphilis, tuberculosis and the scorbutic joint.

Cardio-Vascular Conditions.—Subacute Bacterial Endocarditis is confusing only in the older child; it is rare in the young school age child. Since it is implanted on an already involved rheumatic heart it is doubly confusing early in the disease. However, time, the appearance of embolic phenomena large or small, as petechia, and positive blood culture will usually make the diagnosis. All the collagen diseases especially lupus erythematosus disseminatus and rheumatoid arthritis give cardiac and arthritic manifestations since rheumatic fever may be essentially the same disease or a different allergic form thereof diagnosis can be difficult. Since the prognosis differs so markedly in the various forms it is well to try to differentiate these conditions. As lupus usually has a fairly typical skin manifestation, has a graver, usually fatal course and no nodules, a diagnosis can ultimately be made. Rheumatoid arthritis is "said to show less migratory joint manifestations," more small, permanent, abnormal joint manifestations and usually sparing the heart and has an equivocal effect from salicylates; often there are higher swinging temperatures; long observation is necessary in these cases as often borderline cases are almost impossible to differentiate from each other.

Hyperthyroidism can superficially mimic rheumatic fever, with low grade fever, tachycardia, tumultuous heart action. But radioactive iodine uptake test, basal metabolism in the older child will help in differentiating. Congenital cardiac defects at times confuse the diagnosis; but history of lesion from birth, bizarre murmurs, the diagnostic patterns in the classical defects, aided by

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Arterial Hypertension

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TREATMENT of patients with hypertensive vascular disease is based on definitive diagnosis and classification of the kind of malady from which the patient suffers. Arterial hypertension, like fever or leukocytosis, is of multiple origin. No discussion of its treatment is possible which does not presuppose an estimate of the nature, extent and rate of progress of the disease.

The term "hypertensive vascular disease" has value because it is broad and inclusive. It means a state in which arterial tension is increased over long periods of time and one which is usually associated with premature damage to blood vessels and to the tissues and organs they supply. It has no etiologic and often little physiologic connotation. It includes a most common lethal disease of adult life; namely, essential hypertension. The cause of this disease is unknown. The term also includes a variety of secondary, sometimes transitory, hypertensive states, the origin and nature of which are either known or suspected on adequate clinical and functional grounds. While this review of treatment is concerned more particularly with "essential hypertension," it is also concerned with some of the other types of hypertensive disease which simulate essential hypertension.

Essential hypertension is characterized by persistent elevation of systolic and diastolic arterial pressures. In its early stages, which begin probably in the 20's and 30's, or in adolescence, the elevations of arterial pressure are transitory, and subside promptly on rest and minor re-orientation of habit and attitude. In its later stages, the elevations of arterial pressure are more severe, more lasting, more resistant to minor modes of treatment. Finally, the levels of pressure, even at bed rest and under sedation, tend to stabilize at high levels. At any stage in the disease, but as might be expected, more commonly during the phases of persistent and severe elevation of pressure, there appear evidences of advancing arteriolar sclerosis, which are reflected in damage to the brain and, in lesser degree, to the retina, kidney and other vascular beds. With these, go signs of damage to the function of the myocardium. In a small percentage of patients, essential hypertension is manifest as the "syndrome of malignant hypertension," in which the progress of vascular damage is catastrophically accelerated with predominance of damage in the renal vascular bed The same syndrome of accelerated arteriolar damage may be precipitated by other hypertensive disease states.

The so-called "secondary" hypertensions, i.e., the hypertensive states of known or suspected origin, can be classified, according to their causes, as: (1) neurogenic, (2) endocrine, (3) vascular and (4) renal. As examples we note the hypertension in chronic porphyria as of presumptive neurogenic origin, the hypertension and nephrosclerosis of Cushing's syndrome, adrenal cortical tumor and of adrenal medullary pheochromocytoma as of endocrine origin, the hypertension of coarctation of the aorta as a type of cardiovascular hypertension and that of chronic renal disease (glomerulonephritis, pyelonephritis) as of renal origin. The therapeutic importance of such a classification and diagnosis lies in the fact that, for example, cases of pheochromocytoma and some with unilateral renal disease can be cured by surgical removal of the offending organ.

The hypertension of aortic arteriosclerosis is of particular significance in considering the treatment in hypertensive vascular disease. The increase in arterial pressure is largely, if not entirely, systolic. It is due to a failure of the aorta, which has become inelastic, to expand and adapt its capacity to the blood ejected from the heart during each beat. Consequently, there is an abrupt rise in systolic tension in the large arteries as blood is forced into them on its way to the arterioles. The extent to which systolic pressure rises depends on cardiac rate and cardiac output, and, in the last analysis, most of all on stroke volume. Consequently, anything which tends to change stroke volume or cardiac output tends to have a parallel effect on systolic tension. Thus, it is not paradoxical, but entirely logical that this form of hypertension, in which the large arteries are least elastic, is also the form in which the levels of systolic tension fluctuate most widely. Cardiac output in intact human beings is predominantly under nervous control, but varies also with metabolic rate, tissue demands and other factors. Therefore, it is a common experience that mild measures such as

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rest, reassurance and sedation and control of obesity, which tend to decrease cardiac output, often have dramatic results in decreasing arterial tension in elderly people. It is this responsiveness of pressure levels in arteriosclerotic hypertension which has led so many unwary clinicians into unwarranted therapeutic claims. Similarly, the confusion of arteriosclerotic hypertension with essential hypertension (diastolic hypertension) has led many older patients into disproportionate anxiety and concern.

Arteriosclerotic hypertension, in contrast to essential hypertension, is a disease which begins in middle and old age. Usually in the 50's, transient increases of systolic tension occur, which, as time goes on, become persistent, at least during casual measurements. The diastolic pressure is little if at all increased. The underlying disease is a generalized arteriosclerosis. There are therefore to be found evidences of arteriosclerosis in the heart, brain and kidneys of most of these people. But this disease has a very slow rate of progress. Although vascular accidents can occur without warning, most of these people live to very nearly a normal expectancy of life.

The treatment of this condition is basically the treatment of old age, and of vascular complications as they appear. Many of the general and some of the more specific measures which apply in essential hypertension apply here also.

Pathogenesis

It may be well to review, very briefly, current views on the pathogenesis of experimental hypertension because it provides a background, all too limited at present, on which the physician may ultimately base more rational therapy.

There are those who believe hypertension is solely due to the occurrence of vasoconstrictor substances, those who believe it is wholly due to excessive vasomotor activity and those who, like us, believe in a combination of the two.

Evidence of a neurogenic origin comes chiefly from the bedside. The irritable, hostile, anxious patient with labile sympathetic nervous system can hardly fail to impress the attending physician with the importance of the nervous system in the pathogenesis of his disease. A scant beginning has been made in the understanding and description of the disordered psyche of those patients. Attempts have been made to reproduce neurogenic types of hypertension in animals by bilateral sino-aortic denervation. But this experimental disease has no chronic clinical counterpart that can be recognized at present.

The chief source of information on the participation of the nervous system in the genesis of hypertension has come from the operation of sympathetic neurectomy and ganglionectomy on hypertensive patients. A hesitant and uncertain beginning had been made in the use of these operations on the Continent as long as twenty years ago, but it was not until they were actively investigated as a method for the treatment of hypertension did any significant observation appear. We need hardly remind an audience of physicians of the wide variety of opinion expressed on the results of these operations, having run the gamut from "a cure" to "positively harmful." But time and observation have softened these differences. Three facts of importance may now be regarded as established: (1) arterial pressure in some patients is significantly lowered; (2) the patient is often clinically improved even when the fall in blood pressure is slight or absent; (3) no harmful effects have been observed as a result of the fall in blood pressure. While these results suggest the important participation of the nervous system in the genesis of hypertension, they do not prove it. Perhaps we are a little overcautious, but better so at this stage of knowledge in the hope that more rigid proof will be forthcoming.

No conclusive answer has been brought to the question of a circulating pressor substance as one of the causes of hypertension either in man or animals. But there again there is much to suggest the participation of the renal vasopressor system. Briefly, this system consists of an enzyme, renin, contained in the tubular cells, which acts on renin-substrate, an alpha$_2$-globulin produced by the liver, to produce a third substance, angiotonin.

Angiotonin, when injected into normal human beings, produces most of the hemodynamic changes which are characteristic of essential hypertension itself, and this constitutes important evidence that angiotonin, or something very much like it, could be the cause of essential hypertension. But so far, no one has found conclusive evidence for the existence of angiotonin in increased amounts in the blood of hypertensive patients or dogs with experimental hypertension. Either it is there and somehow active in amounts which defy our crude methods of assay, or some other substance is

responsible. We hold the view that angiotonin is the more likely.

Certainly the method currently available for the quantitative determination of renin and angiotonin are unsatisfactory except when the analysis is made on very large amounts of blood and even then the results so far have not been conclusive.

There is some evidence that a protein pressor agent is present in the blood of hypertensive patients, but it is not sufficiently cogent at present to add another participant in the genesis of hypertension.

In recent years, we have become interested in the problem of the responsiveness of the blood vessels themselves. It has become apparent that the response may vary spontaneously severalfold under what seem to be normal conditions. Thus, without any change in the concentration of pressor agents in the blood, increased responsiveness of the blood vessels could of itself elicit hypertension. We have been able to increase responsiveness by bilateral nephrectomy, destruction of the spinal cord or the administration of tetraethylammonium chloride and to decrease it by shock or the removal of the liver. The relationship of these results to hypertension is not as yet clear, but any physician with imagination will recognize the importance of changes in sensitivity of the blood vessel muscle on which pressor agents and nerve stimuli must act to control the caliber of the vessel and its resistance to blood flow.

Another aspect of pathogenesis is described by Selye. In this view, emphasis is placed on the arteriolar disease elicited by desoxycorticosterone. The suggestion is that deviant and abnormal responses to injury (psychic or somatic) cause the liberation of some such hormone from the adrenal cortex and brings the renal pressor system into abnormal activity as the result of nephrosclerosis.

Treatment

1. *General Measures.*—In a short space, it is not possible to describe in detail the general measures so important in the treatment of hypertensive patients. This has already been done in a recent manual for the patients themselves.

Perhaps the principles of these general measures can be summed up as follows: (1) cultivating serenity; (2) coming to terms with the inevitable; (3) living a life of moderation; (4) participating only in those affairs which one can influence; (5) avoiding fatigue; (6) having more frequent periods of rest; (7) avoiding obesity; (8) avoiding food fads and eating a well-balanced diet in small repasts; (9) selecting a physician in whom the patient can place full responsibility for wise counsel. Each of these measures requires much thought and planning, and when carried out thoroughly and systematically will add much to the comfort of life and probably conserve life itself. Administered in a cursory fashion, both physician and patient lose invaluable aids.

Excessive nervousness contributes greatly towards keeping the blood pressure elevated. Its control is often a complex problem. If, as often happens, it is associated with the female menopause, administration of stilbestrol (0.1 to 0.5 mg.) daily with meals may do much to relieve it. Occasionally, it is due to marked hyperthyroidism when it should be treated as any other case of this disease. Phenobarbital (30 mg. t.i.d.) is a generally useful sedative and may be continued for a long time if necessary. The barbiturates are very satisfactory when used under the physician's guidance for insuring adequate sleep. Other more elaborate physical methods such as Jacobson's "progressive relaxation" will not be discussed in this short review. Psychoanalysis or psychiatric guidance has its place in the treatment of some patients.

If hypertension occurs in association with one of those rare diseases such as tumor of the adrenal gland, clearly the treatment consists in removing the exciting cause. Less than three per cent of all patients will come under this category.

2. *Nephrectomy.*—If it is demonstrated that disease is limited to only one kidney, its removal has been observed in a few cases to be followed by return of the blood pressure to near normal levels. The indications for nephrectomy are unfortunately not so simple. There is no known method which demonstrates that one kidney is entirely normal and the other diseased. The impression is all too common that reduced excretory function in one kidney and normal renal excretory function in its partner constitute convincing evidence. Actually, there is no direct relationship between excretory efficiency and height of the blood pressure. Nor does there appear to be any clearly defined relation between hypertension and the appearance of the kidney as demonstrated by the pyelogram. Secondly, the conclusion has been drawn from very brief experiments in rats

that the removal of the kidney causing hypertension is usually followed by a return of blood pressure to normal. When the latter has been elevated for months or years, removal of the offending kidney is ordinarily not followed by a return to normal. Much the same seems true in human beings. So there has been in the past years a false optimism that nephrectomy would be a very important tool in the treatment of hypertensives. Perhaps this optimism is now giving way to a wave of too great pessimism.

Thus, it it is shown by x-ray examination or by kidney function tests that one kidney is obviously infected and that hypertension has developed in the past two or three years and that the other kidney seems normal, it is probably desirable to remove the offending kidney. Here, as in most situations, the indication is urological rather than medical. But if the hypertension has persisted for five years or more, if there are evidences of arteriolar sclerosis, or if the evidence for unilateral disease is uncertain, it would appear better to avoid the operation. In doubtful cases, a clearly positive family history of hypertension may be contraindication, since familial hypertension is more often "essential" than renal.

As an example of the remarkable effects nephrectomy sometimes produces in early cases of hypertension, that of MacKay, Proctor and Roome may be given. This patient underwent a pelviolithotomy and while still in the hospital the arterial blood pressure began to rise. Shortly this was followed by the signs of severe malignant hypertension. Because of the alarming course of the disease, nephrectomy was decided upon. At operation, it was found that a thick hull enveloped the parenchyma from which the kidney could be shelled out. Shortly after nephrectomy the blood pressure returned to normal and all of the signs disappeared.

In general, it is wise to view nephrectomy as a procedure which should be done when removal of the kidney would be desirable on urological grounds. Only occasionally, a patient is seen in whom abolition of the hypertension is the prime object of the operation.

3. *Potassium Thiocyanate.*—This salt has had a checkered career in the treatment of hypertension. It was introduced many years ago but fell into disrepute because of toxic manifestations occasionally observed. When Barker published a method for controlling the dosage by its level in the blood, a new wave of interest occurred. Since that time, the drug has been extensively studied. Despite this, there are two schools of thought about its value.

Many are convinced that it has a real place in the treatment of hypertensives. It lowers arterial blood pressure moderately in roughly 40 per cent of the patients and has a mild sedative effect if optimal levels of thiocyanate are reached in the blood stream. It often is a most valuable remedy for intractable headaches that afflict hypertensives. These appear to be its especial virtues.

Its drawbacks consist chiefly in the fact that it often causes a feeling of intense lassitude, of heaviness of limb. Eruptions on the skin, and more especially the mucous membranes, may occur. In older patients, mental disturbances have occasionally been encountered. Death from thiocyanate has even been recorded in the literature, but analysis of such records seems to indicate unwise judgment in the use of the drug in most of these cases. It is fair to say that death has occurred at some time from almost every drug in common use.

Our own experience with some 500 patients treated with the drug is that it is useful. We have seen only occasional patients who showed signs of its toxic action and none of them have been serious. No deaths have occurred. It has been not uncommon to see patients who were said to respond unfavorably to thiocyanate, but who, when carefully controlled, showed no toxic signs and even a favorable response.

4. *Sympathectomy.*—Dorsolumbar and splanchnic nerve resection as methods of treating patients with hypertension, just as thiocyanate, have been greeted with cheers or jeers. It is probably true that reasons intially offered for the performance of these operations were incorrect. And as a result, a flood of criticism greeted the work. Time has shown much of this to be unjustified. The field was further confused by those who attempted to transfer results obtained on animals with experimental hypertension to human beings, concluding that since in dogs these operations produced little or no reduction in arterial pressure, the same was true in man.

Probably, fortunately, sympathectomy for the treatment of hypertension developed empirically and before hypotheses were advanced to explain

it. In fact, if it had depended on some of them it might never have been practiced. Thus, it has been suggested that the effect of the operation does not depend on denervation of the vasomotor apparatus of the abdomen other than the kidneys but rather on the relief of renal ischemia. In this view, renal denervation alone should be fully effective, whereas it has no effect. Further, the view depends on renal ischemia as the efficient cause of hypertension, whereas such ischemia is not uniformly present either in experimental hypertension or in hypertension in human beings. Lastly, the operation only rarely increases renal blood flow, which is usually unchanged after an otherwise satisfactory operation. The fact that renal blood flow does not usually decrease after sympathectomy when arterial pressure has fallen, indicates that renal resistance must have diminished and, although without reference to the hypothesis of renal ischemia, it has also been suggested that this fact establishes a beneficial and specific effect of renal denervation. This point of view too is defective in that it ignores the normal autonomy of the renal circulation by which the kidney varies its resistance with arterial pressure in order to maintain as well as can be a normal rate of blood flow. There is no reason to suppose that this mechanism is in any way defective in hypertensives. Indeed, there is good evidence from the renal hemodynamic effects of high spinal anesthesia to establish its presence and within limits, normal operation. The persistence of this intrinsic renal mechanism of regulation of blood flow after operation can scarcely be attributed to denervation. Sympathectomy only leaves the kidney where it was before and its effectiveness in lowering arterial pressure is therefore largely extrarenal.

We have briefly discussed sympathectomy from the viewpoint of what has added to knowledge of the mechanism of the disease. Now we would add a word as to the usefulness of the operation. There is now no doubt that when these operations are sufficiently extensive as in the technique of Smithwick and the modified Adson procedure that marked falls in both systolic and diastolic pressures occur in some patients. This is most pronounced when the patient stands erect. Indeed, postural hypotension is one of the best indices of the completeness of the operation. The length of time blood pressure remains reduced is variable. The average is perhaps from three to five years, some less and others more.

It is not unusual for regression of the morbid changes in the eyegrounds of patients with malignant hypertension to occur. And one of the most striking changes is the loss of headaches and the regaining of a sense of well being.

One of the greatest difficulties in the application of the method has been the inability to find any single or even multiple tests which will determine whether a favorable outcome is to be expected. The hypotensive effect of administration of sodium amytal has been most extensively used to ascertain the drop in pressure to be anticipated as the result of operation. Some believe that when an adequate fall in pressure does not occur, the likelihood of success is poor, but that an adequate fall is no guarantee of success. Various authors have their own criteria and it now seems to be a matter of personal experience as to how patients are selected.

As we said before, the precise mechanism of the action of these operations is not clear. It is not improbable that several factors play a part, among these being a reduction of venous return to the heart when the patient stands erect, as a result of denervation of extensive vascular areas. Besides this, the denervation of the large splanchnic area prevents the normal reactive vasoconstriction from occuring when the patient moves from a horizontal to an erect posture. Fainting is often observed presumably because this protective mechanism has been blocked in its action.

Thus it may well be that the overall reduction of blood pressure during the 24-hour period may be quite significant and the time taken away from the destructive and sclerosing effects of the elevated pressure on the blood vessels contributed towards increasing longevity.

5. *Kidney Extracts.*—The reasons for the search for substances in the kidneys which might lower blood pressure need not concern us here. Extracts of kidneys have been prepared which lower blood pressure and cause improvement in the clinical condition of patients. But the mechanism by which these extracts act is entirely unknown.

The term "nonspecific" has been employed to describe their action. This may be true in the superficial sense of the word, i.e., the lowering of pressure is due to an unknown mechanism set into

action by a heterogeneous group of substances. Among these is fever, but many patients have fever without reduction in arterial pressure and a few vice versa. The important point to recognize is that if any form of therapy will lower blood pressure and benefit the patient, it does not make a great deal of difference what the mechanism is.

It is the belief of a very few investigators that certain types of extracts of kidneys have these beneficial effects, but none to date has been able to prepare an altogether suitable extract. Such a search is naturally a tedious and expensive job, since patients must be the test objects and nothing is known of the chemical nature of the substance sought.

There is some evidence that suggests but does not prove some degree of specificity. Kidney extract will reverse the intrarenal hemodynamic change usual in many cases of hypertension to a more normal one. Further, cardiac output will be elevated in hypertensive patients when the mean pressure falls.

It is quite clear that work along this line is still in its embryonic stage. None can foresee its outcome, hence the desirability of not attempting to codify knowledge in this field prematurely.

6. *Excessively Low Sodium Diets.*—The use of low sodium diets has recently been revived, but now the restriction is even more severe, often not more than 200 mg. of sodium being allowed in one day's diet. This level is extremely difficult to attain in most patients and is altogether impractical for some.

The results in our patients have been moderately encouraging. At least a quarter show significant fall in arterial pressure and some feel better. Administration of salt to these patients is associated with a rise in blood pressure. It appears that there is some association between the change in salt content of the diet and the height of the arterial pressure in these particular patients. Rarely, circulatory collapse occurs from the severe salt deprivation, hence the treatment has potential dangers. These can be exaggerated because most patients when not in the hospital under rigorous supervision, do not keep their salt intake below 0.5 grams.

Those of us who remember the era when low salt diets were being indiscriminately prescribed for hypertension recall that at times some lowering of pressure occurred apparently as a consequence of the low salt intake. But at that time, the intake almost never went below one gram of sodium chloride. It thus remains to be determined whether the drastic restriction now suggested is really necessary. At best, relatively few patients will be benefited from drastic salt restriction, but for these, it may well be worth the effort.

The use of amberlite resins has been suggested as a shortcut to a salt poor diet (Dock). Oral administration of certain types of these exchange resins should theoretically remove enough sodium from the intestinal juices to achieve the desired reduction in sodium balance. It is much too early to recommend their general use. It is possible that some resins may do serious damage by adsorption of other electrolytes than sodium from the gastrointestinal tract. So far, we have had reasonably good luck with them.

7. *Rice Diet.*—There are few suggestions for the treatment of hypertension that have stirred so much controversy as the rice diet. Every shade of opinion currently exists. Some see in it a cure, while others view it as deserving of nothing more than casual interest. These views are colorful, even if not based on much substantial evidence.

At present, it is not possible on the basis of published evidence to arrive at any considered opinion of its value. Many of us remember the extremes of view expressed fifteen years ago about sympathectomy. The approach, as one looks back upon it, contributed little to understanding of the nature of the problem.

The rice diet and the sodium depletion diet are alike in that each yields about 2000 calories fuel value and contains less than 0.5 gm. of sodium. They differ in their protein content, which in Kempner's regime is less than 20 gm., and in Kempner's assumption that other foods contain unidentified toxic substances not present in rice, which embarrass the kidneys.

Iu 1944, Kempner first reported on the use of the rice diet. It contains 2000 calories, not more than 5 gm. of fat, 20 g. protein, 200 mg. chloride and 150 mg. sodium, 250 to 350 gms. of rice (dry weight) is taken daily. All fruits are allowed except nuts, dates, avocados, dried or canned fruit, or fruit derivatives to which substances other than white sugar have been added. Not more than 1 banana may be taken a day. White sugar and dextrose are allowed ad libitum; on the aver-

age, a patient takes about 100 g. daily, but if necessary, as much as 500 g. may be used. Tomato and vegetable juices are not allowed. Usually no water is given and the fluid intake is limited to 700 to 1000 c.c. of fruit juice per day. Supplementary vitamins are added—vitamin A, 5000; D, 1000 units; thiamin chloride, 5 mg.; riboflavin, 5 mg.; niacinamide, 25 mg.; calcium pantothenate, 2 mg. Some form of iron is desirable. Rest in bed is neither necessary nor desirable. Weight may decrease markedly during the first 20 days.

Our own experience with the rice diet has been limited to some fifty patients. Some of them would not stay on the diet because of its monotony. Among those that did so after a prolonged control period, effects on the blood pressure have not been nearly so impressive as when the diet was started shortly after coming under our care. A fall in renal blood flow occurred in many and in a few has not seemed to be reversible. The eyegrounds of one patient may have cleared as the result of the diet, but the cause of this is uncertain. Thus, it is our view that the rice diet deserves much more careful study before its wide popularization by some of the leading clinics of the country. Our studies strongly suggest that the rice diet is essentially a low sodium diet. When blood pressure falls during its use, the addition of salt again raises pressure.

The divergent conclusions reached by different investigators lead only to conclusions that the problem is still in the investigational phase and that the investigations should be performed seriously and with every possible safeguard. One of the essential safeguards least employed is an adequate control period, and this in the face of the common experience that the level of arterial pressure may drop by 50 mm. Hg or more during the first few weeks of patient-physician contact. Casual blood pressure readings over even many years, however, do not replace as controls frequent measurements before and during the periods of dietary control. Another factor in prescribing the diet is the patient's enthusiasm for it. Very often he can only be persuaded to it by promise of relief or threats of serious complications which few physicians can conscientiously subscribe to. Still, some encouragement may be necessary, for it is only the rare patient who will take a detached and scientific view of a rigid dietary scheme.

The effects of weight loss due to the diet has not been adequately evaluated. European experience during the war would suggest that these play a much more important part in determining the decrease in arterial pressure than deprivation of animal protein and provision of protein of vegetable origin.

Finally, in the presentation of data, it should be remembered that essential hypertension is a disease with an extraordinarily variable course, so that composite curves carry little meaning or conviction. Rather, the aim should be to present well-documented studies of individual cases in which the factor of sodium loss, weight loss, hypometabolism, fluid shift and, above all, the variability of arterial pressure under control conditions are presented in detail.

8. *Rutin.*—In 1860, rutin was isolated from buckwheat, but it was not until recently that it has received clinical trial. The latter was suggested because of the similarity to vitamin P or hesperidin. It is believed by some to be effective in so-called "increased capillary fragility" in hypertension, in retinal hemorrhage, apoplexy, pulmonary hemorrhage and drug reactions.

Reports on the value of rutin are highly contradictory. In no small measure, this is due to the wide variability of the result of the various tests of capillary fragility. Indeed, at present, it seems fair to indicate that none of the tests have either been studied sufficiently carefully or the consistency of the results been demonstrated. Little or nothing is known of the natural history of increased capillary fragility.

Several authors have believed rutin prevents or cures the hemorrhages in diabetes, retinitis, and if it had the desired effect on the capillaries and if hemorrhages result from increased fragility, this would appear to offer opportunity for successful treatment. The more recent and careful articles find rutin of no value in the treatment of diabetic retinitis.

Some time ago, rutin was suggested as a treatment for hypertension, but careful study has shown it to have no significant effect on blood pressure. Griffith employed it in the treatment of a group of hypertensives in whom he believed he had demonstrated increased capillary fragility. The fragility in many cases became normal. It is not clear what, if any, effect this had on the course of the disease.

Next, rutin was used in the hope that cerebral hemorrhage might be avoided on the theory that

hemorrhage is due to capillary bleeding. There seems to be no cogent evidence that this is so. Since it is impossible with present methods to know when cerebral hemorrhage is going to occur, the problem of studying the prevention becomes one of the greatest difficulty. At present there is no reason whatever for prescribing this drug for the prevention of cerebral hemorrhage, despite drug house literature urging such indiscriminate use.

The most significant evidence that rutin has some pharmacological action comes from its use in experimental animals in preventing or reducing the hemorrhagic lesions induced in dogs by single large doses of x-rays. It may also be of some value in purpura hemorrhagica. Despite the claim that it conferred protection in anaphylactic and histamine shock, this has not been substantiated by recent work.

Clearly, the widespread sale of this material on the basis of published evidence was most unwise. The drug houses have presented only the side of the picture which makes the drug salable, rather than that showing it to be of only minor or of no value in treatment of hypertension. Unless better evidence is forthcoming, rutin has no place in the management of hypertension.

9. *Bacterial Pyrogens in the Treatment of Malignant hypertension.*—Daily administration of concentrated bacterial pyrogens, especially those from *B. prodigiosus,* over periods of weeks to months, often causes remarkable clearing of the pathologic changes in the eyegrounds of malignant hypertensives. Thus in a series of patients, average arterial pressure (systolic and diastolic, divided by 2) was reduced from a mean of 126 to 100 mm. Hg. Papilledema disappeared in all but two and fresh exudates disappeared. Improvement was also noted in the electrocardiogram and the heart size diminished.

Except for the persistent elevation of arterial pressure, remissions have lasted for an average of two years. Of the remaining nineteen patients, eleven responded more briefly, while eight showed no change. All but two of these are dead and these two are presently under treatment.

The greatest drawback in the treatment is that tolerance to the pyrogen usually appears in from five to nineteen weeks after which arterial pressure usually rose to the control levels but without reappearance of the malignant syndrome.

It has not been possible to select those patients who will respond to pyrogen therapy. Six patients who were virtually blind and four who had congestive failure responded favorably. In general, it appears that if renal excretory function is reduced by 50 per cent or more, the response will be poor, or at least more than temporary.

This treatment must be regarded as experimental until more experience has been gained. In view of the gravity of the disease, the results so far obtained justify its further use when the patient can be under the daily care of the physician.

Conclusions

Views on the nature and treatment of diseases of the circulation, arterial hypertension in particular, are rapidly changing. The pessimism of twenty years ago is giving way to the hope that with increased understanding of the mechanism of these diseases, cure may ultimately be achieved. Cure is rarely achieved today, but much can be done to ameliorate the disease.

The pathogenesis of hypertensives remains unsolved, but investigation is actively being pursued in the two principle theories, namely: (1) the occurrence of circulating pressor agents such as angiotonin; (2) the occurrence of increased vasomotor activity. The fusion of those two seemingly diverse beliefs may well occur.

Treatment must cover a wide variety of signs or symptoms because blood vessels are affected in most parts of the body. No highly specific remedies which will lower blood pressure are available but the discerning use of several agents leads to far greater comfort for the patient and doubtless in many cases to prolongation of life.

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Brain tumors are missed mainly because of sketchy neurologic history and examination and false evaluation of personality disorders, seizures, headaches and eye signs.

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About 50 per cent of ureteral stones are passed within a week of the first symptoms; some may remain in the ureter as long as three years without harm.

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No medical examination is complete unless the psychological aspects are respected.—MSMS Mental Hygiene Committee

Anticoagulant Therapy in Heart Disease

With Particular Reference to Its Use in Congestive Failure

By Ivan F. Duff, M.D., and
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USEFULNESS of anticoagulants in heart disease has been appreciably extended by investigations carried out in the last three years. In particular, the value of heparin and dicumarol appears to have been well established in the treatment of acute myocardial infarctions. Their effectiveness as prophylactic agents is being demonstrated in the patient in congestive failure and the individual with rheumatic heart disease and auricular fibrillation subjected to showers of systemic and pulmonary emboli. We are becoming aware, too, of the protection which they may afford to the individual with an impending myocardial infarction or who has already survived one or more such catastrophes.

Treatment of Acute Myocardial Infarctions

The praiseworthy accomplishments of the Committee of the American Heart Association for the Evaluation of Anticoagulants in the Treatment of Coronary Thrombosis with Myocardial Infarctions are well known. One thousand and thirty-one cases were involved in this co-operative study: 442 of these receiving "conventional therapy" constituted the "control group"; 589 receiving anticoagulants in addition to conventional therapy constituted the "treated group." Several conclusions were drawn from the accumulated data.[24]

It was apparent that the death rate and incidence of thromboembolic complications in the group receiving anticoagulants were markedly lower than among patients treated by conventional methods; indeed, somewhat more than one-third of the subjects who would have died without anticoagulant therapy survived the specific attack under consideration. Reduction of thromboembolic complications was the main factor in reducing the death rate. Patients 60 years of age or older received the greatest benefit in reduction of mortality. The crude death rates for younger patients in both the treated and untreated groups did not show a significant difference; the incidence of thromboembolic complications, however, was decidedly lower in the treated group.

The study demonstrated that although the incidence of thromboembolic complications, like that of death, was highest in the second week, it was marked throughout the first four weeks. Because it is impossible to predict which patient will suffer a thromboembolic complication, it is therefore important to give anticoagulant therapy to all patients with a myocardial infarction provided such treatment can be safely and effectively controlled. Treatment should be instituted as late as the second or third week or even later if complications occur. The hemorrhagic complications were so mild and so few and the benefits of treatment in the older age group were so pronounced that the committee did not hesitate in prescribing anticoagulants for the older patients.

The committee recommended that treatment, to give maximum protection, be employed for at least four weeks after the last thromboembolic complication. This is the ideal. Actually, in our experience, economic reasons not infrequently force us to regard three weeks as adequate treatment during the last few days of which the patient is made ambulatory.

The objectives which one hopes to attain with anticoagulants after a myocardial infarction are: (1) prevention of venous thrombosis in the peripheral veins and the occurrence of pulmonary infarctions; (2) prevention of secondary myocardial infarctions either by the extension of the thrombus within the coronary artery or by the development of infarctions in new areas in the myocardium during the period of convalescence; (3) prevention of the development of mural thrombi and thereby the development of pulmonary, cerebral and peripheral emboli; (4) prevention of concomitant arterial thromboses in the brain, lungs, etc. In this co-operative study one or more thromboembolic complications occurred in 11 per cent of the treated patients; only six per cent, however, occurred while under the full effect of anticoagulant therapy. One or more thromboembolic complications occurred prior to death in three per cent of the treated group. These figures emphasize that in individual cases any one of the above complications may sometimes occur with a lethal

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outcome despite the early institution of energetic treatment.

It is oftentimes difficult to be immediately certain of the diagnosis of a myocardial infarction. Again, in some instances, the clinical findings may be at variance with the electrocardiographic changes. In these circumstances the most conservative plan of management is to proceed with the anticoagulants. If the diagnosis is later disproved, the treatment may be stopped. The decision as to whether heparin should be employed oftentimes arises. We are inclined to agree with Hines and Barker that treatment with dicumarol alone, were it started within the first forty-eight hours, would probably afford adequate protection in the majority of instances.[10] As they point out, however, such treatment would not prevent the extension of the thrombotic process in the coronary vessels or intramural thrombosis during the period of shock which often occurs early in the illness. Moreover, as Schilling notes, if one counts the delay associated with establishment of diagnosis and the period of time required for dicumarol to become effective, a period of four to five days may easily elapse before effective treatment is achieved. In addition, the development of congestive failure further favors the development of thromboembolism.[20] For these reasons the early administration of heparin, in addition to the starting of dicumarol, seems advisable.

Definite contraindications to heparin, dicumarol or tromexan may exist after a myocardial infarction, as in a patient with a potential or actual hemorrhagic condition or concurrent severe renal or hepatic disease. The most important contraindication, however, to the use of dicumarol and tromexan is lack of adequate laboratory or clinical control.[5] In patients treated in the home and in the smaller hospital, this constitutes a real problem. Under these circumstances the depository heparin preparations may be of special value. Although they are sometimes painful and quite expensive, their administration, controlled by the simple Lee and White test performed at the bedside, is entirely possible for periods of ten to fourteen days or even longer.[15]

Chronic Administration of Anticoagulants to Prevent Recurrent Myocardial Infarctions

Appreciation of the effectiveness of the anticoagulants in acute myocardial infarctions led Nichol at an early date to investigate their protective value in the patient who has already sustained one or more infarctions.[19] His series now consists of seventy-eight cases, treated from three to sixty-two months; thirty-three of these had experienced more than one attack of coronary thrombosis. Twelve died while under treatment. In four, death was due to recurrent attacks of coronary thrombosis; in six, it was ascribed to either acute coronary insufficiency, congestive heart failure or "cessation of cardiac activity" (probably ventricular fibrillation or ventricular standstill). Cerebral hemorrhage was the cause of death in two patients. Autopsies were performed in eight, revealing fresh coronary thrombosis or infarction in three. No mural thrombi or other complicating thromboembolic manifestations were found. He also observed that the patients experienced significantly fewer subjective complaints of cardiac pain while taking dicumarol, it being minimal or absent in nearly all of 57 moderately active patients on sustained treatment. The recent work of Gilbert et al, suggesting that dicumarol increases coronary volume flow by a strong dilating effect is of interest in this respect.[7] Other alterations in blood properties associated with the dicumarol effect, now poorly understood, may be responsible for this improvement.[19]

The chronic administration of dicumarol to ambulatory patients is frequently associated with an appreciable incidence of bleeding episodes. The difficulty of drawing conclusions as to the efficacy of such treatment is quite obvious when it is recalled that it is impossible to predict which patients will have but a single myocardial infarction and which will have repeated episodes. It is obvious also that the regime, even when carefully followed, may fail to prevent myocardial infarctions. Despite these and other disadvantages, the venture appears well worth while in selected individuals. In four patients treated by us in this manner from four to nineteen months, angina has become less severe and less frequent; gradual return to gainful employment has been possible.

Anticoagulants in the Treatment of Impending Myocardial Infarctions

Closely allied to the preceding topic is the use of anticoagulants in acute coronary insufficiency or impending myocardial infarctions. Consideration of this occurred to Nichol and his co-worker during their studies to which previous reference has

been made. We are all familiar with the individual whose symptomatology, chiefly that of angina, suggests acute embarrassment of the coronary vessels and yet in whom the diognostic criteria for a myocardial infarction have not been fulfilled, or must await serial electrocardiograms. The problem in these individuals, as Nichol points out, is immediate therapy.[18] With the anticoagulants we now have an incentive for the early detection and treatment of impending myocardial infarctions. Heparinization, in particular, appears indicated in these individuals as soon as the diagnosis is made; it is usually administered with dicumarol.

As far as is known, report of but one study has been published concerning a group of 41 such patients.[18] A fair degree of relief from anginal pain was obtained in all but three patients. In many cases relief of pain was prompt and striking after heparinization was achieved. There were no deaths in the entire group while anticoagulants were in force. Only two of the forty-one developed transmural myocardial infarctions after anticoagulants were started. Twenty-four patients developed clinical signs of subendocardial necrosis. Of the eighteen patients who received anticoagulants for a short term of treatment, four died with acute myocardial infarctions seven days, fourteen days, two months and ten months after stopping dicumarol. In a fifth patient an acute, non-fatal infarction occurred ten days after a short term course of dicumarol was stopped. The need for further investigation of the benefits of anticoagulants in this particular field is obvious.

Anticoagulants as Prophylaxis Against Thromboembolism in Congestive Heart Failure

A number of studies have demonstrated the frequency of thromboembolic complications in heart failure. Kinsey and White, searching for the cause of fever in 200 cases of congestive failure, reported pulmonary infarctions in twenty-four out of fifty autopsied cases.[12] Carlotti, et al, studied 273 patients with pulmonary embolism in 194 of whom the clinical admitting diagnosis was congestive failure.[3] Wishart and Chapman believe the figure 22 per cent approximates the true incidence of pulmonary infarcts in patients with congestive heart failure, not all of whom die.[21] The mortality, however, associated with pulmonary infarctions is greater in patients with heart disease (irrespective of the presence of congestive failure) than in patients without heart disease.[13]

As others have emphasized, an important discrepancy exists between the frequency with which thromboembolism is recognized in life and its true incidence as observed in the necropsy room. At the Massachusetts General Hospital patients with pulmonary infarctions were studied during two five-year periods (1936-1940 and 1941-1945). The diagnosis was made correctly in the first group in 33.3 per cent and 60 per cent in the second series.[3] We obviously need to become more aware of the danger of thromboembolic complications in patients with heart disease. In addition to this it should be emphasized that but little has been done to reduce the incidence of venous thrombosis and embolism in this group. At the University of Michigan Hospital the incidence of pulmonary embolism among non-cardiac patients has declined, in an eight-year period, from 169 cases in the control period of 1940-1943 to fifty-three cases in the years 1944-1947. The incidence, however, in patients with heart disease has remained virtually unchanged, being forty-one cases (of which twenty-four were fatal) in the control period and 44 cases (of which thirty-seven were fatal) in the second period.[14]

The possibility of altering the frequency and gravity of thromboembolism in patients with heart disease, and particularly in congestive failure, has been explored by two different approaches. Homans, representing the surgical point of view, recommended vein ligations to reduce the incidence and mortality associated with thromboembolism in heart disease.[9] Carlotti, et al, reported a mortality rate of 28.3 per cent in a group of sixty treated by ligation, contrasted, in a control group of 215 cases treated without ligation, with a mortality rate of 50.7 per cent.[3]

The first report of the use of dicumarol as an adjunct to the treatment of congestive heart failure was made by Anderson and Hull in November, 1947.[1] Sixty-one patients were treated with dicumarol in addition to the conventional treatment. Fifty-eight patients receiving only conventional therapy constituted the control group. The mortality rate was 11 per cent in the treated group and 18 per cent in the control group. In the treated group of patients there were five instances of thromboembolism which may have played a part in 2 deaths. In the control group there were nine instances of thromboembolism

which may have played a part in the death of seven patients. They observed that the mortality was lower and the apparent incidence of thromboembolism was less in the group of patients who received dicumarol. They could not, however, be certain that the difference in mortality was significant or that the apparent difference in incidence of thromboembolic complications was real. More recently Hull has stated: ". . . We have during the past two years been carrying on a controlled study on the use of dicumarol in patients with congestive heart failure, a series now running well over 300 cases. A significant reduction of mortality has occurred, which can be attributed to the practically complete absence of thromboembolic complications in the treated group."[11]

A preliminary report of a similar investigation was made by Wishart and Chapman in November, 1948.[21] They administered dicumarol to all patients (61) hospitalized because of congestive failure; a control series in the same hospital was not studied. The mortality rate was 38.2 per cent (twenty died); there were 12 necropsies. The incidence of pulmonary infarctions during effective dicumarol therapy was 6.5 per cent. No deaths could definitely be attributed to classic pulmonary embolism; one death might have been due to such a condition. One patient developed a venous thrombosis at a time when dicumarolization was adequate; in two patients in whom it was not adequate, definite pulmonary infarctions occurred.

Harvey and Finch have recently reported their studies in a group of patients with congestive heart failure; dicumarolization was carried out depending on whether their hospital admission was on an even or an odd day; there were eighty patients in the treated group and 100 in the control group.[8] Patients with a history or findings suggestive of thromboembolic disease at the time of admission were excluded from both series. They did not include patients dying within forty-eight hours and patients in failure because of acute myocardial infarctions. The groups were similar as to type of heart disease, age distribution and severity of congestive failure. In the control group the total mortality was 17 per cent; there were thirteen pulmonary emboli, eight of which were proven at autopsy; in addition there were two questionable cases; there were eight cases of thrombophlebitis. In the treated group the mortality was nine per cent; none of the deaths were believed to have been due to pulmonary embolism. There were two questionable cases of pulmonary emboli; there was one definite case of thrombophlebitis and one questionable case.

A pilot study to evaluate the effectiveness of prophylactic dicumarolization in congestive failure before thromboembolism has occurred has been under way at the University of Michigan Hospital. A study plan was used similar to that outlined by Harvey and Finch. There were thirty-one patients in the "treated group." In a control group of thirty-two patients, thirteen died (40 per cent); there were twelve autopsies. Nine patients sustained pulmonary infarctions, five of which were proven at autopsy; there were three cases of proven peripheral venous thrombosis. Of the entire control group, fourteen sustained some type of a thromboembolic phenomena; 18 escaped this catastrophe. Three (9.7 per cent) died in the treated group; there was 1 autopsy. None died of thromboembolic complications. A probable massive cerebral hemorrhage, perhaps to be associated with treatment, was fatal in one case. There were two patients who sustained definite pulmonary infarctions, despite effective prothrombin levels, both eventually recovered. Clinical evidence of peripheral venous thrombosis was not present in these patients. Of the entire treated group, two sustained some type of thromboembolism; twenty-nine escaped this complication.

Although the total number of patients treated with prophylactic anticoagulants is small in the quoted series, the results appear sufficiently encouraging to justify further exploration. In this regard it may be stressed that, in our experience, the benefits of anticoagulant therapy are less obvious once a patient with congestive failure has sustained a pulmonary infarction. In an earlier study of a group of twenty-five cardiac patients, none of whom are included in the above series, eighteen had sustained pulmonary emboli before treatment with anticoagulants was instituted; in eight, this appeared to have occurred at least a week prior to hospitalization after which confusion of the clinical picture frequently further delayed treatment. Twelve of the group died. Despite effective reduction of the prothrombin, recurrent pulmonary infarctions occurred in twelve from which two survived. On the basis of this experience, it appears that if anticoagulants are to effectively protect the patient in congestive failure, they must be instituted early and prior to the onset of thromboembolism.

The employment of anticoagulants in the presence of heart failure should be carried out with some caution. The existing evidence indicates that in some individuals heart failure may be associated with a lowered prothrombin activity and increased sensitivity to dicumarol. Out of thirty patients described above, pretreatment prothrombin levels were 50 per cent or less of normal concentration in seven. Under these circumstances, then, one should guide dicumarol dosage in the knowledge of the pre-treatment prothrombin level. A second point of some interest concerns the use of dicumarol in a patient with severe hypertension, particularly if the individual has sustained a cerebrovascular accident in the past.[5,16] Unusual sensitivity to dicumarol and associated fatal cerebral hemorrhages have been observed under these circumstances. By way of contrast, Nichol questions whether hypertension exaggerates the risk of cerebral hemorrhage during anticoagulant therapy.[17]

Long-term Anticoagulant Therapy in Patients with Recurrent Systemic Emboli

The use of prophylactic long-term anticoagulant therapy in patients with old rheumatic heart disease complicated by valvular damage, auricular fibrillation and showers of systemic peripheral emboli was first reported by Wright in 1947.[22] Since that time further encouraging reports have appeared.[2,4,6,23] About sixty patients are involved in these series, in some of whom treatment has been carried out for as long as three years.

Several points of interest arise in the selection of patients for such treatment. It is said that only between four and eight per cent of patients with rheumatic heart disease and mitral stenosis ever experience emboli. The occurrence of auricular fibrillation appears to increase the occurrence of intracardiac thrombi about threefold. The interval, however, between the onset of fibrillation and embolic episodes is unpredictable. With these facts in mind it seems clear that the presence of rheumatic heart disease with mitral stenosis and normal rhythm is not in itself sufficient to justify institution of long-term anticoagulant therapy. Whether or not one is justified in undertaking such treatment with the advent of auricular fibrillation, or soon after its appearance, is controversial. The development, however, of congestive failure in such a patient, with its increased tendency to intravascular clotting, would encourage one to institute treatment.

Once embolization has occurred, the indications for long-term treatment are more definite since there is no means by which the occasional patient who will suffer repeated attacks of recurrent emboli may be identified. It appears to us that the same reasoning may be applied in selecting for treatment the patient with non-rheumatic heart disease and auricular fibrillation and in whom systemic or pulmonary emboli have occurred.

Once the patient and physician have committed themselves to the decision of instituting chronic anticoagulant therapy, the question will arise as to how long it should be continued. There is, at the present, no answer. Careful perusal, however, of the fascinating case reports published by different observers may be helpful in this respect. Wright, for instance, has stated: ". . . Patients who have had as many as twelve and even twenty emboli have ceased having emboli and in the six treated for more than one year (one nineteen months) no emboli have occurred."[23] Such reports and personal experience appear to indicate that the therapy has brought about a decrease of the expected incidence of thromboembolism. The relationship, moreover, between the sometimes rather prompt development of further thromboembolic episodes and cessation of treatment appears reasonable. In view of this, treatment, if successful, may well be continued for an indefinite time; perhaps for the remainder of life or until some other more satisfactory approach is available.

In evaluating the effect of therapy in any specific case, one should recall that it is not unusual for several months or years to elapse between embolic episodes. It may be recalled, too, that the anticoagulants are not always effective in suppressing intravascular clotting. In an occasional individual the clotting tendency may be more powerful than the anticoagulant effect of dicumarol or heparin. This, together with fragmentation of pre-existing mural thrombi, may explain embolic episodes occurring despite theoretically effective reduction of prothrombin activity. Notwithstanding the occurrence of these occasional failures, the institution of protracted anticoagulant therapy in these unfortunate individuals appears to be worth while provided, of course, it can be done safely and effectively.

Summary and Conclusions

It is our opinion that all cases of acute myocardial infarction should receive heparin and

dicumarol provided circumstances permit their safe and effective control. On the basis of personal experience, and the recorded observations in the literature, it is our tentative impression that the usefulness of the anticoagulants may be extended to other fields of heart disease. Dicumarolization to reduce the incidence and mortality associated with thromboembolism appears to be a useful adjunct to the conventional treatment of patients in congestive heart failure. The incidence of thromboembolism is described in a small controlled series of patients in congestive failure receiving prophylactic dicumarol. Long-term administration of anticoagulants appears to offer distinct advantages to the individual threatened by an impending myocardial infarction or who has already sustained recurrent infarctions of the heart. Prophylactic, long-term treatment appears to offer some protection to the individual with auricular fibrillation and recurrent systemic or pulmonary emboli.

Heparin, dicumarol and tromexan are not perfect therapeutic agents. Adequate clinical and laboratory control is essential for safe and effective administration of these drugs. The principles of management now well defined by clinical experience, and described in detail elsewhere, remain largely the same regardless of the indications for their use. Their employment in heart disease sometimes implies prolonged administration to ambulatory patients. The effectiveness, and certainly the safety of such treatment, requires close co-operation between an intelligent patient, a conscientious physician and readily available and reliable laboratory facilities.

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RHEUMATIC HEART DISEASE

(Continued from Page 1410)

in a busy day to listen patiently to the story of vague symptoms and signs. It is only by piecing together many little things that a real and main diagnosis will finally appear. He must be able to watch the progress of those symptoms and signs so that when they disappear under his care he will not, from fear or indecision, continue the restrictive measures too long.

Since rheumatic fever has its highest incidence in families with low income, insufficient to care for a long-time chronic illness, inadequate facilities and low understanding or interest in health situations, a community must provide hospital service for the severely ill patient and specialized clinic service for follow-up examination, evaluation and consultation. Joint co-operation between physician, clinic and hospital, and community program will serve to diagnose and control rheumatic fever.

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Treatment of Congestive Failure Refractory to the Standard Regimen

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THE FIVE BASIC therapeutic measures for congestive failure; namely, rest, salt restriction, digitalization, diuresis and mechanical removal of fluid, have been in use for many years. Modern pharmacological research has introduced pure cardiac glycosides as an alternative for digitalis leaf and effective mercurials to replace the more toxic merbaphen, but has not as yet made any fundamental advance. In fact, the modern trend in therapy has been toward the employment of a standardized dosage of digitalis and mercurials in all cases. Although a stereotyped regimen succeeds in restoring compensation to the majority of patients, a significant minority fails to respond and is unjustifiably considered refractory. Most patients who remain in congestive failure after the standard regimen will regain compensation if treatment is individualized with due regard to their disturbed physiological state. The purpose of this communication is to discuss the physiological factors that may be responsible for apparent refractoriness and to emphasize the application of accepted therapeutic principles in their correction.

The refractory cardiac patient should, therefore, be reevaluated with the following questions in mind:

1. Have etiological factors amenable to specific therapy been overlooked?
2. Has adequate rest been provided?
3. Has sodium been restricted sufficiently?
4. Has the optimal effect of digitalis been obtained?
5. Has optimal use been made of diuretics?
6. Have serous effusions, preventing restoration of function, been aspirated?

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Have Etiological Factors Amenable to Specific Therapy Been Overlooked?

An accurate etiologic, anatomic and physiologic diagnosis is essential to the intelligent management of congestive failure. In the survey of the refractory patient, conditions that may be mistaken for cardiac failure, such as cirrhosis, nephrosis, vena caval obstruction, scleredema, etc., should first be excluded. Then particular attention should be directed toward the recognition of the following primary and contributory factors, for which specific therapy is available.

Correctable Mechanical Defects.—Many congenital abnormalities capable of producing intractable congestive failure, such as patent ductus arteriosus, pulmonic stenosis and coarctation of the aorta, may be cured or at least improved by modern cardiac surgery.[5,8,12,18,19] In chronic rheumatic valvular disease, failure due chiefly to mechanical obstruction of an orifice (e.g. marked mitral stenosis or aortic stenosis) must be distinguished from failure due chiefly to a myocardial lesion, since the former may be alleviated by commissurotomy.[1] Tamponade from pericardial effusion or constrictive pericarditis must be recognized because of the cure or improvement effected by paracentesis in the former and surgical stripping of the epicardium in the latter.[10] Rare defects amenable to surgery, such as arteriovenous aneurysm, should not be overlooked as a cause or contributory factor in congestive failure.[22]

Endocrine, Metabolic and Nutritional Factors.—Diseases necessitating increased cardiac output and work, such as hyperthyroidism, beriberi and anemia, may be responsible for refractory failure in patients with underlying heart disease. Hyperthyroidism is easily overlooked in the cardiac patient because of the frequent absence of the characteristic facies and eye signs.[27] The presence of good appetite, unusual alertness, heat intolerance, warm palms, uncontrollable tachycardia, increased pulse pressure or an enlarged nodular gland should lead to an investigation for hyperthyroidism and, if the diagnosis is confirmed, to specific treatment. The suspicion of beriberi should be aroused by a history of dietary inadequacy, as in chronic alcoholism, by the development of edema prior to dyspnea, by clinical evidence of avitaminosis, together with physical signs referable to increased cardiac output; the diagnosis is confirmed by the specific response of

the cardiac manifestations to thiamin.[14] Anemia, though usually recognized, is frequently neglected in the treatment of the refractory cardiac patient. If edema in the cardiac patient proves refractory to the standard regimen, the possibility of complicating factors, such as myxedema or hypoproteinemia, must receive consideration and specific treatment.

Underlying or Intercurrent Infection.—Acute myocarditis due to rheumatic fever, subacute bacterial endocarditis, diphtheria and other infections must be recognized and receive specific treatment when such is available. Fever due to infection elsewhere in the body should be controlled as promptly as possible in decompensated patients because of the fact that it contributes to the failure by increasing cardiac work.

Underlying or Associated Pulmonary Disease.—Bronchial and pulmonary infections in patients with left-sided failure contribute to pulmonary congestion and must receive symptomatic and specific treatment. Pulmonary embolism and infarction are often responsible for refractoriness to therapy in patients with congestive failure due to other causes. Prevention of future embolism by anticoagulants or venous ligation proximal to the thrombus is essential to recovery. Chronic obstructive pulmonary emphysema may eventually give rise to cor pulmonale and congestive failure, that may be helped by mechanical measures causing elevation of the diaphragm.[11]

Acute Myocardial Infarction.—Acute myocardial infarction may be responsible for intractable failure and should be recognized because of the value of anticoagulants and the precaution to be taken in the use of digitalis.

Assuming that the foregoing possibilities have been investigated and adequately treated, persisting congestive failure demands attention to the following measures.

Has Adequate Rest Been Provided?

The patient in congestive failure has an inadequate cardiac output for his metabolic needs.[29] These resolve themselves into basal metabolic requirements, which are virtually irreducible,* and demands of activity, which can be controlled. The failing heart is unable to meet the stress of exercise by a sufficient increase in cardiac output.[21] The kidneys respond by enhanced tubular reabsorption of sodium and water,[9,32] and reduced blood flow,[30,31] leading to an increase in blood volume and a rise in venous pressure. Continued physical activity above the patient's capacity establishes a vicious cycle of progressive sodium and water retention, increasing blood volume and venous pressure, and consequent passive congestion and edema of the pulmonary and systemic circuits. To break this vicious cycle, restriction of activity within the limits of the patient's reduced cardiac output is obligatory.

When congestive failure is refractory to the standard regimen in the home, hospitalization is required to order to provide maximal rest, as well as accurate control of diet and medication. The cardiac patient obtains more rest in the sitting than in the recumbent position because recumbency promotes shift of blood from systemic to pulmonary circuits, further reducing vital capacity and increasing respiratory effort and cardiac work.[26] Maximal rest is obtained during the day in a large chair, suitably supported by pillows, and at night in a bed supplied with head blocks of six to nine inches and a back rest for elevation and support of the trunk and head. Rest in this manner not only decreases cardiac work, but also tends to prevent the complications of phlebothrombosis, pulmonary embolism and bronchopneumonia, which are all too frequent in the cardiac patient strictly confined to bed. To further promote rest, the patient should use a commode by the bedside rather than a bedpan or the bathroom. Efforts to secure emotional rest by judicious sedation, elimination of disturbing visitors and provision of pleasant nursing care, combined with the foregoing measures to achieve physical rest, will place the patient in the optimal condition for recovery of cardiac functional competency.

Has Sodium Been Restricted Sufficiently?

Most of the incapacitating symptoms of heart failure result from congestion and edema of the lungs, abdominal viscera and extremities. Accumulation of edema fluid in heart failure is dependent upon increased retention of sodium by the kidneys.

Mere abstention from salty food and elimination of salt in cooking and at the table may not suffice in the more severe cases. The advantage of a low sodium intake without drastic dietary restriction

*Although basal requirements may be reduced by thyroid ablation, through total thyroidectomy or radio iodine,[6] so drastic a measure should be reserved for patients refractory to all other forms of therapy.

can be gained by the administration of cation exchange resins, which interfere with the absorption of sodium from the alimentary tract.[25] Unfortunately, these resins also interfere with the absorption of potassium and calcium and may produce severe hypokalemia or hypocalcemia. For these reasons, these resins are not advisable unless facilities are available for frequent determinations of blood potassium and calcium.

The time-honored Karell regimen, consisting of 800 ml. of whole milk daily, enabled many patients to regain compensation, but failed in the more severe cases because of insufficient limitation of sodium intake (400 mg.), and too drastic a restriction in water and other essential ingredients. Greater success has been obtained with modern cardiac diets, supplying 200 to 400 mg. sodium daily, but refractory cases of severe congestive failure are still encountered. As long as sodium is restricted, the patient should be urged to take a total of 2.5 to 3.0 liters of fluid daily, but no advantage is gained from forcing fluids above this level.

A diet restricted to 50 mg. sodium daily, but furnishing adequate water, potassium, chloride, protein and total calories, is recommended as a temporary expedient in severe congestive failure, particularly when refractory to the standard regimen.[23] The diet consists of 2000 ml. of Lonalac formula and 500 ml. of orange juice with 30 gm. of added sugar. It is made adequate in vitamins by the use of crystalline supplements. The Lonalac formula is prepared as follows: Lonalac powder, 250 gm.; sugar, 125 gm.; and water, 2000 ml. The formula is mixed well into an even suspension, flavored with vanilla and kept chilled; 400 ml. of this are given five times a day. Orange juice, 250 ml., is given two times daily.

Congestive failure, refractory to bed rest, a low sodium diet, digitalization and mercurial diuretics, carried out in the hospital for from one to several weeks, has shown dramatic improvement following institution of this 50 mg. sodium diet, without other change in the therapeutic regimen.[23] Relief of pulmonary congestion and edema was particularly striking during the administration of this diet. Restriction of sodium intake to 50 mg. daily is seldom needed for more than one week and, as long as compensation is maintained, a gradual step-like increase may be made to a maximum of approximately one gram.

The diet should furnish adequate potassium, since metabolic studies have demonstrated that large quantities of this element are taken up by the cells during recovery from congestive failure, presumably to replenish a deficit. The only exception to a liberal potassium intake is the presence of anuria or severe oliguria, which may lead to potassium intoxication.

Has the Optimal Effect of Digitalis Been Obtained?

Digitalis increases the force of systolic contraction in the dilated failing heart.[28,37] Therapeutic doses, given to decompensated patients with rapid, regular sinus rhythm, cause a primary augmentation of cardiac output, permitting a secondary fall in rate. Digitalis has an even more dramatic effect in congestive failure accompanied by auricular fibrillation because it not only improves ventricular contractility, but also specifically reduces ventricular rate by depression of conductivity through the atrioventricular node. The improvement in cardiac output is followed by rise in renal blood flow and glomerular filtration, increase in urinary excretion of sodium, chloride and water, evacuation of pulmonary and peripheral edema, relief of dyspnea, reduction in circulating blood volume and fall in venous pressure.

The refractory patient is generally receiving digitalis in some form when he comes under consideration. The first problem is to determine whether the degree of digitalization is inadequate, optimal or excessive. The differentiation between underdigitalization and overdigitalization is complicated by the fact that the familiar gastrointestinal symptoms of digitalis intoxication, namely, anorexia, nausea and vomiting, may also occur as a manifestation of inadequately treated passive congestion of the abdominal viscera, whereas the early cardiac signs, namely, premature beats and bigeminy, may be found in association with untreated cardiac decompensation. The presence of these symptoms and signs at the advent of digitalis therapy, the lack of temporary mitigation and failure to induce diuresis or relieve dyspnea would indicate underdigitalization; the appearance of these symptoms and signs after a digitalis induced diuresis would point to overdigitalization. When uncertain clinically, the distinction between underdigitalization and overdigitalization can generally be made electrocardiographically.

The ventricular rate serves as a valuable

criterion of the degree of digitalization in the presence of auricular fibrillation, but not in regular sinus rhythm. The ventricular slowing in patients with auricular fibrillation under digitalis therapy is a manifestation of depression of conductivity through the atrioventricular node, produced in part by vagal stimulation, in part by myocardial action. With 50 to 75 per cent of the full digitalizing dose, the ventricular slowing is chiefly vagal in origin; apical rates may be reduced to the desired range of 65 to 75 per minute with the patient at complete rest, but rise excessively under light exercise to well over 100, as a result of inhibition of vagal tone.[16] If partial digitalization of this degree is maintained after ambulation, exercise will be tolerated poorly and congestive failure will reappear. As the retained digitalis is increased from 75 per cent to a full therapeutic amount, the fraction of the depressed atrioventricular nodal conductivity caused by direct myocardial action rapidly increases to approximately nine-tenths. This generally succeeds not only in maintaining the resting rate within the desired range, but also in keeping the rate under light exercise below 100 per minute, thereby reducing the likelihood of recurrent failure after ambulation.

If the survey reveals underdigitalization, the next problem is to determine whether a change in preparation or merely an increase in dosage is advisable. Underdigitalization may occur with the tincture as a result of measurement by drops instead of by graduated volume, deterioration from prolonged exposure to air, or irregularities in absorption. Difficulties may be encountered with digitalis leaf because of local gastric irritation or incomplete and irregular absorption. When the degree of digitalis effect remains suboptimal or inconstant, despite a fair trial of tincture or leaf, change to a crystalline preparation is advisable.

Digitoxin is preferable in most cases because of its complete absorption from the alimentary tract, its uniform potency and its prolonged action.[15] If digitoxin was the drug in use at the time the patient was regarded as refractory, it will be necessary to re-evaluate dosage. The standard practice of administering a total of 1.2 mg. to a previously undigitalized patient on the first day and then instituting maintenance doses is inadequate for the majority in severe congestive failure.[13] If the previous regimen has left the patient moderately to markedly underdigitalized, digitoxin may be started in a dose of 0.2 mg. every six hours; if slightly to moderately underdigitalized, digitoxin may be started in a dose of 0.1 mg. every six hours. Since these doses are cumulative and will cause intoxication sooner or later, close observation is obligatory. When therapeutic effects (diuresis, relief of dyspnea) have been obtained, a trial dose of 0.2 mg. digitoxin daily should be substituted for maintenance. This dose is excessive for many patients and may require downward revision. If toxic manifestations supervene, the drug should be withheld until the excess is eliminated and then reinstituted in maintenance doses.

The margin between therapeutic and toxic doses of digitoxin is so narrow in some cases that it is difficult to maintain satisfactory control. Under these circumstances, better control may be obtained with digitoxin, which has a wider margin of safety.[3] If the patient is digitalized at the time of the substitution, maintenance doses of 0.5 mg. daily may be tried: if underdigitalized, doses of 1.0 to 2.0 mg. daily may be necessary temporarily.

Has the Optimal Use Been Made of Diuretics?

Before cardiac decompensation is considered refractory to treatment, the patient will have received a trial of mercurial diuretics. During the 24-hour period after the administration of a mercurial to a patient in congestive failure, a rise in urinary output above 2.5 liters and a reduction in body weight by at least two pounds may be expected. In the event of an unsatisfactory response to mercurials, the following causes must be considered: (1) an undependable route of administration or an inadequate dose; (2) electrolyte depletion with consequent renal refractoriness, resulting from excessive dosage of mercurials, or from repeated vomiting or diarrhea: (3) inability of the kidneys to respond because of a markedly reduced glomerular filtration rate.

Route of Administration and Dosage.—When no contraindication to the use of mercurials exists, the patient in severe congestive failure must receive them by a method that insures absorption of an adequate dose. The oral and rectal routes, though often satisfactory in mild congestive failure or in maintenance therapy, are undependable in severe congestive failure, due to poor or irregular absorption. Practically all patients who are capable of responding to mercurials will obtain satisfactory diuresis from intramuscular injections, provided

that an effective preparation is given in adequate dosage into a non-edematous area. The intravenous route, although slightly more effective than the intramuscular,[2] is seldom necessary and should be avoided because of the rare but fatal shock reaction that may occur from sudden introduction of a therapeutic dose into the circulation.[4] Mercuhydrin, thiomerin and mercupurin are approximately equal in therapeutic effect, but the two former are tolerated slightly better than the latter. The choice of the diuretic is not so important in determining the response obtained as the intelligent use of the agent selected. The usual initial dose of 1 ml. intramuscularly should produce a satisfactory diuresis. The response to this and all subsequent doses should be quantitated by measurements of 24-hour urinary volume and, whenever possible, by daily determinations of body weight. When the results from a 1 ml. dose are unsatisfactory, an intramuscular injection of 2 ml. should be given 24 to 48 hours later. If this is likewise ineffective, an evaluation of the renal status and blood electrolytes is advisable rather than repetition of the injection, further increase in dosage, or change in preparation. On the other hand, if either the 1 ml. or 2 ml. dose proves effective, it should be repeated at intervals of two or three days until clinical signs of peripheral and pulmonary edema have disappeared. Discontinuance before this objective is attained will be necessary if toxic symptoms supervene or if a previously effective dose no longer evokes a satisfactory diuresis. In the latter event, a determination of blood electrolytes and renal functional status is indicated before further diuretic agents are administered.

Electrolyte Depletion with Consequent Renal Refractoriness.—The pharmacologic action of mercurials consists in a depression in renal tubular reabsorption of chloride,[7,20] sodium[38] and potassium,[33] with a resultant loss of these ions into the urine and a consequent increase in urinary volume. The mercurials generally cause a disproportionately greater loss of chloride than of sodium and water.[35] As a consequence, the plasma chloride concentration falls progressively and is replaced by bicarbonate, whereas the plasma sodium remains at a plateau or falls in a slower rate, resulting in a hypochloremic alkalosis. A similar state may be reached in untreated congestive failure as a result of refusal of food, coupled with repeated vomiting. When the plasma chloride concentration falls below 85 m. eq. per liter, the stimulus to conserve the dwindling body stores may overcome the effects of therapeutic doses of the mercurials and may lead to tubular reabsorption of practically all of the chloride in the glomerular filtrate, and secondary inhibition of diuresis. Hypochloremic alkalosis should be suspected as a cause of an inadequate response to the initial dose of a mercurial, if incessant vomiting had been present, and should be suspected as a cause of the development of refractoriness after a series of injections, particularly when an adequate diuresis was obtained after first doses, followed by diminution and then by absence of response. After confirmation of the diagnosis by demonstration of significant lowering in plasma chlorides and reciprocal elevation of blood carbon dioxide combining power, hypochloremic alkalosis may be corrected by the administration of ammonium chloride. Plain tablets or capsules are preferable to the enteric coated preparations, because of the fact that the latter may pass through the bowel unabsorbed. Doses of 2.0 to 4.0 grams of ammonium chloride three times daily are usually tolerated when given with meals and should raise the plasma chloride concentration sufficiently within two to three days to permit a satisfactory response to a mercurial diuretic. The remaining edema can generally be evacuated by a mercurial injection every three days, preceded by ammonium chloride for one or two days.

Hyponatremic acidosis may complicate the combination of ammonium chloride and mercurial diuretics,[36] particularly in the presence of renal disease, and may be responsible for refractoriness to therapy, for muscular cramps, for untoward cerebral symptoms, such as disorientation, stupor and coma, and for circulatory collapse. After confirmation of the diagnosis by the demonstration of a reduction of plasma sodium below 125 m. eq. per liter and of blood carbon dioxide combining power below 30 volumes per cent, the abnormal electrolyte pattern must be corrected by the administration of sodium chloride or sodium bicarbonate. The paradox of sodium administration may restore sensitivity to mercurials and permit a diuresis in patients refractory because of hyponatremia.

Depletion of tissue potassium and hypokalemia

may complicate mercurial diuresis unless the diet contains adequate amounts of potassium to replace urinary losses. Hypokalemia should be suspected at the appearance of apathy, drowsiness, muscular weakness and hypotonia, or dyspnea with gasping respiration or circulatory collapse in a patient who has been receiving mercurial diuretics, but eating little or no food. The diagnosis may be confirmed by demonstration of a low plasma potassium, by typical electrocardiographic findings or therapeutic response to potassium chloride in doses of 2 to 3 grams four times daily.

Inability of the kidneys to respond to mercurials may be encountered when the glomerular filtration rate is reduced well below 50 per cent of normal. Under these circumstances most of the scanty glomerular filtrate may be reabsorbed by simple diffusion through the tubules, even in the presence of therapeutic doses of a mercurial diuretic.[34] This situation should be suspected in patients who fail to respond satisfactorily to the initial mercurial injection, yet show no significant reduction in the plasma concentration of chloride and sodium. The next step is to reinvestigate for evidence of complicating glomerulonephritis, which is a contraindication to the use of mercurial diuretics. If glomerulonephritis, polyarteritis nodosa, "malignant" hypertension and other diffuse lesions of the renal vascular tree or glomeruli are excluded, the markedly reduced glomerular filtration rate may be merely the result of the severe degree of congestive failure. Under these circumstances, complete rest is obligatory to obviate the diversion of renal blood flow produced by exercise. Full digitalization may increase cardiac output and renal blood flow sufficiently to restore responsiveness to mercurials. The xanthine diuretics, which also act chiefly by depression of tubular reabsorption of sodium chloride and water,[17] may significantly enhance the effect of a mercurial and deserve a trial as a preparatory agent in patients who have shown suboptimal responses to mercurials. The most effective of the available preparations are theophyllin and aminophyllin, given in doses of 0.2 to 0.3 grams three times daily with meals. A new agent chemically related to the xanthines, namely, 1 ethyl-3 n propyl-4 amino-uracil, given orally in a dose of 0.3 grams four times a day, appears on preliminary trial to produce a diuresis of water, sodium and chloride comparable to that from a mercurial injection.[24] If further experience confirms the results of the preliminary trial, this agent will constitute a significant addition to the therapeutic armamentarium.

Have Serous Effusions Preventing Restoration of Function Been Aspirated?

Pleural effusions may greatly aggravate dyspnea and are generally absorbed slowly, if at all, under the influence of digitalis and diuretics. During physical examination, special attention should be directed toward the detection of pleural fluid and, if doubt exists, a roentgenogram should be obtained. Significant amounts of pleural fluid should be removed by thoracentesis. Ascites, sufficient to make the abdomen tense, interferes with renal venous drainage and should be removed by paracentesis. In the event of intractable peripheral edema, the Southey-Leech tubes may be employed.

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Systolic Murmurs

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SYSTOLIC MURMURS are common. They have been studied intensively for more than a century and still many of them cannot be interpreted with assurance. Because they were often present in persons dying of heart disease, it was generally taught in the last century that systolic murmurs were a sign of serious disease of the heart. About the beginning of the present century it became apparent that systolic murmurs were common in subjects who had no symptoms and no other signs of cardiac disease and that autopsies, when such persons died, disclosed no abnormality of the heart. This led to the view that systolic murmurs alone, in the absence of other evidence of cardiac abnormality, should never be regarded as indicating disease of the heart.[6,7] It was soon recognized that some systolic murmurs are "functional" in origin, while others are "physiologic" or "accidental."[3] More recently attempts have been made to distinguish by the quality or intensity of the murmurs those due to organic disease from those unaccompanied by cardiac abnormalities.[2,5]

A widely accepted classification of systolic murmurs is as follows:

1. *Organic.* These are pathological and are caused by organic disease of the cardiac valves or great vessels or by congenital abnormalities.

2. *Functional.* These are pathological and are due to dilatation of the heart or great vessels, or to conditions which increase the speed of the blood flow, such as anemia, fever and thyrotoxicosis. The valves are normal.

3. *Physiologic.* These are not pathological. They have not been adequately explained, but are not due to disease of the heart.

Many of the organic and functional systolic murmurs can be interpreted correctly because of the accompanying symptoms and signs of the conditions responsible for them. There remain the many instances of systolic murmurs not accompanied by symptoms or signs of disease which might cause them. They include:

1. *Cardiorespiratory murmurs.* These are physiologic. They are often heard only during inspiration and disappear when the breath is held at the end of expiration.

2. *Inconstant murmurs.* Nearly always, these are physiologic.

3. *Constant murmurs.* These are the most perplexing. Most of them are physiologic, but some are pathological as shown by long term follow-up studies. They call for careful and thorough examination.

Systolic murmurs may be graded according to their intensity.[2,5] The louder murmurs commonly prove in the end to be associated with organic cardiac disease; it appears, therefore, that they should be interpreted as organic even in the absence of symptoms or other signs of heart disease. The fainter murmurs usually do not prove to have an organic basis and, in the absence of other evidence of cardiac abnormality, should be regarded as physiologic. The murmurs of intermediate intensity give the most difficulty; in the absence of other evidence of organic disease they should be regarded as physiologic.

Follow-up studies averaging 8 to 9.6 years in rheumatic children with distinct systolic murmurs, but without other evidence of cardiac damage, showed that 42 to 48 per cent developed definite rheumatic valvular disease.[2,4] These observations led to the conclusion that in such cases the diagnosis of organic valvular disease should be made, a conclusion which overlooks the 52 to 58 per cent who did not develop clear-cut organic disease in the follow-up period.[6]

Surely, in the absence of other evidence of cardiac disease, systolic murmurs alone, excepting the very loud ones, cannot signify lesions of sufficient clinical importance to require restrictions or treatment. Beyond the sensible precaution of giving antibiotic prophylactically in the event of surgical procedures, it is best to consider these murmurs as physiologic and therefore harmless. If eventually evidence of organic cardiac disease should develop, that would be time enough to impose restrictions or advise treatment; until then a diagnosis of heart disease should not be made.[8] An unwarranted diagnosis of heart disease often leads to unnecessary restrictions and anxiety, or to so-called iatrogenic heart disease.[1] To diagnose heart disease when it is not present is to make just as serious an error as to fail to diagnose it when it is present.

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From the Department of Internal Medicine, University of Michigan Medical School.

Cardiac Housewife Program of the Michigan Heart Association

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ONE OF the very important factors in the treatment of ambulatory cardiac patients is teaching them to limit their activities as indicated by their functional status. Modification of the physical demands at work is usually possible in the employed cardiac by means of the industrial principle of selective job placement. Such a change of job is not possible when it is the housewife who is disabled by heart disease. She must continue to be a homemaker, but it is possible to modify the way in which she performs her daily tasks. The physical effort expended at these tasks can be greatly decreased by the application of work simplification methods. This is the technique of the industrial "efficiency expert." Practical courses teaching these work-saving methods are now offered as a community service by the Michigan Heart Association without cost to the cardiac housewife. Applications are accepted only upon approval by the patient's physician.

The idea of applying the industrial technique of work simplification to homemaking activities is not a new one, but its application to the disabled homemaker is quite recent. In 1948 a subcommittee of the New York Association, headed by Dr. Lillian Gilbreth, studied this problem. This resulted in the publication of the booklet, "Heart of the Home," now available from the Michigan Heart Association. In brief, this booklet suggests easier ways of doing housework. The booklet has been widely distributed, but it became clear that a more personal form of teaching was needed, and that it must be shown that work savings in homemaking could be effected without extensive alterations of the kitchen and without the purchase of expensive labor-saving machines. An expert in housework simplification methods was located and interested in this problem. She is Mrs. Frances Sanderson, chairman of the Department of Home Economics of Wayne University, who had been teaching these methods to the "normal" homemaker. In February, 1950, she was given a cardiac homemaker to study under medical guidance. Analysis was made of the daily work habits of the patient, recording each detail performed. Waste motions and useless trips were pointed out; rearrangement of dishes and utensils were made; a cart to transport dishes and utensils was suggested. In the preparation of one meal alone, these simple changes resulted in cutting steps walked from 672 to 266, stooping from twenty to eight times, standing on tiptoe from forty-four to twenty-nine times. The total number of steps alone saved at preparing this one meal were calculated to represent a savings of sixty-one miles in a year. The patient become very motion conscious and was soon finding new short cuts by herself. She found that not only was her actual workload decreased but that she had more time in which to rest, for the more efficient method was also shorter. She told us that she was now able to plan her rest periods rather than interrupt a job because dyspnea made her rest. She also was very happy because she said that she was now able to do more for herself yet feel no fatigue at the end of the day. It was felt that this was proof that work simplification was of value to a cardiac homemaker. Therefore, other cases were studied and the same interest generated in the patients. Our home economist consultant meanwhile was learning of the restrictions important to the cardiac. Pictures were taken, charts and graphs drawn of the changes in arrangement. Thus, visual teaching aids were obtained during the study of actual cardiac patients. It is these data which are now being offered in the course for the cardiac housewife at Wayne University. The changes suggested are inexpensive and can be done even by the husband who is not a "handy man." A similar type of class is now being organized for presentation throughout the state in co-operation with Michigan State College.

The present class for cardiac housewives is housed in the Home Economics Department of Wayne University. It is located on the ground floor. The room used contains model kitchens of various types. Thus individual problems can be discussed and particular advantages of different kitchen layouts can be demonstrated. The classes are limited to sixteen per session in order that they can be divided into groups of four for individual conferences between lectures and demonstrations. Two class sessions constitute a course. They are

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Medicine and the Public

By L. Fernald Foster, Ph.B., M.D.
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BEING a practicing doctor of medicine, I am speaking tonight as a representative of more than 5,000 practicing doctors of medicine in Michigan. I am their official spokesman on this occasion, and I intend to give you the opinions and thoughts of the medical profession of Michigan in regard to matters having to do with the general elections on November 7. I have emphasized that I am their official representative, and that I have been instructed to bring you this message because no man can then truthfully say that the information, opinions, accusations and facts which I present here are simply those of one man or of a small group of men. What I am saying tonight are the thoughts of your own doctor.

I intend, first, to tell you why this time on the air has been purchased for my talk. Second, I shall point to several untruths which are misleading the American people, and third I shall present some facts which you, as an American citizen, should know.

These will be offered in the belief that truth is stronger than falsehood. Doctors of medicine base their art and their science on truth; if it were not so, many of you who are alive today would long since have passed away.

Fortunately for scientific medicine and perhaps unfortunately for your future health, doctors of medicine are not propagandists. They do not know the art of the "Big Lie," which I am told, if repeated often enough, becomes accepted as truth. They do not practice the art of spreading malicious rumor, for they are trained, as you want them to be, in keeping inviolate your confidence and your trust. Doctors of medicine are not, generally, great writers or speakers. They could not from the rigorous demands of medical education conscientiously devote sufficient time to become masters of the spoken and written word and engage in malicious propaganda techniques. This the doctors of medicine do know: they know how to keep you healthy; they know how to care for you when you are sick; they recognize and are intensely aware of those factors, both economic and social, that can and do affect your health and well being.

That is why doctors of medicine devote the greatest share of their time to the maintenance of the one thing in which they are most interested —your health.

Because these things are so, the medical profession of Michigan—and throughout the United States—is fighting mad today and is assuming a militant attitude against the purveyors of malicious lies. The profession has no quarrel with you, Mr. Taxpayer. It is angered because your tax money is being used freely by the propagandists to spread brutal falsehoods which hurt you and your chances for continued good health. These same tax-supported falsehoods will eventually stunt the efficiency of our medical profession, the greatest in the world, a medical profession that has, under free enterprise, increased man's life span more than twenty years in the first half of the 20th Century.

Here is the first falsehood of the propagandists —they state that the medical profession is a closed corporation which is restricting the number of doctors being trained in order that there will be more demand for the services of the doctors now in practice. This frank mistatement has been voiced again and again by persons now on the payroll of the Federal government.

Here is the truth. For years the medical profession of Michigan has consistently urged the Michigan Legislature that funds and facilities be made available so that the University of Michigan Medical School and Wayne University College of Medicine might accommodate and train additional doctors of medicine. As late as last September 19, it repeated its plea by adopting a resolution asking for "the development of an aggressive and early campaign to secure from the State of Michigan, and from alumni and other citizens who are interested in better health, funds necessary to enlarge medical facilities and faculties in the state to the end that the resulting increase in the number of medical graduates from the University of Michigan and Wayne University is sufficient to continue to give adequate and good quality medical care to the people of this state."

And so, ladies and gentlemen, I repeat that it is a deliberate falsehood to say that the medical profession does not want more doctors of

Radio Address by L. Fernald Foster, Ph.B., M.D., Secretary, Michigan State Medical Society, November 1, 1950, 10:00-10:15 p.m., Radio Station WJR, Detroit, Michigan.

medicine to be trained. A correlated lie is that doctors' sons are given preference in gaining admission to medical schools. While many such sons do become doctors, the reason for this is quite obvious. Most sons tend to follow in the father's footsteps, particularly when they greatly admire their fathers. The same thing holds true of lawyers' sons who become lawyers, and coal miners' sons who become coal miners through association with their fathers. Doctors' sons absorb the challenge of medicine and its art through their environment and determine early in life to become part of the medical profession. As a direct result they are inherently better qualified at the time for entrance into medical school. But so far as preference for doctors' sons is concerned, I can cite instance after instance where pressure and persuasion by a doctor for his own son has been of no avail; therefore it is obviously untrue that medical schools are more easily entered by doctors' sons.

And here is another deliberate major falsehood:

It is often heard that you can't get a doctor when you need one. Here is the truth. A great statewide survey of Michigan was recently completed by Michigan State College in the most unbiased fashion. Here is what the survey found: Less than 2.5 per cent of the people of Michigan reported *ever* having been unable to get medical care when they needed it. Of this 2.5 per cent less than *3/10 of 1 per cent* of the people report ever having bad results because they couldn't get a doctor—a record second to none in any profession or business anytime, anywhere.

With this factual information, I repeat: The lie of "You can't get a doctor when you need one" can be definitely repudiated.

The international crisis in Korea provided the basis for another unfounded and untrue statement. It was said that the medical profession failed to supply doctors to the armed services in the sudden demand created by the Korean conflict. Let us look at the record: The recent Federal legislation to draft doctors was supported by the American Medical Association, the Michigan State Medical Society and the medical profession generally, because bungling preceded this draft through taking doctors from areas where they were badly needed, simply because the doctor in that area was a reservist. Let me cite but one typical example: that of Mesick, Michigan. The citizens of that representative American community worked hard to make it possible for a doctor to locate and practice there. They built a building by voluntary labor. The building was equipped by the Kellogg Foundation and a well-trained young doctor was obtained. He had scarcely begun practice when he was called by the government to active service. Now this community of 1,800 persons, like before, is again without a doctor of medicine. The medical profession sincerely felt a doctor draft law would permit the orderly and organized selection of doctors from those areas where there is an abundance of doctors. That *is being done today* through committees of the medical profession itself under the new draft law.

It isn't hard to recall that more than 1,500 Michigan doctors of medicine saw service in World War II—and every one of them on a voluntary basis.

How can it be fairly stated that the doctors ever failed to willingly supply their country with patriotic service in time of need? Yet that statement has been made and is being repeated by persons paid with your tax dollars.

Another of those "Big Lies" which have been repeated over radio stations in Detroit and in every major city in the United States is the one first told by an employe of the Federal government and relayed to the people over and over again by his press agents who were paid by your tax dollars.

It is that the American Medical Association spent $20,000,000 on an advertising campaign of lies to the American people.

First let me ask a question. Have you seen this advertisement? It seems as if you should have if twenty million dollars had been spent to bring this ad to your attention. For that amount of money it would seem that a great many advertisements might have been placed before your eyes. And if you have seen it, what were the lies in it?

The real truth is that only one advertisement was placed by the American Medical Association. The advertisement ran only once in the newspapers and periodicals of this nation. A few radio spot announcements were made over some of the nation's radio stations. What was the theme of the message—simply that the voluntary way is the American way . . . well . . . isn't the voluntary way the American way?

How much money was spent by the American

Medical Association? The amount was less than one and a quarter million—not twenty million. And whose money was used? Not the money you pay in taxes. No, it was a small contribution by your family doctor and the other family doctors of the country. The sum of one million seems great to you and me. It shrivels into insignificance when compared with the $75,000,000 of your tax money which I understand was admittedly spent by Mr. Oscar Ewing, Federal Security Administrator, et al. for increased social security and to convert you to the belief that compulsory health insurance is a necessity. That the American Medical Association spent $20,000,000 is another typical example of false propaganda being hurled against your medical profession.

What is the medical profession doing to combat this organized flood of misrepresentation to the American public?

As an organization it is doing its best to tell the truth and to get out the vote. It is willing to abide by the will of the people expressed in the voting booths of this nation on November 7.

As an organization we of the medical profession are pointing out the dangers of Socialism of which socialized medicine is merely an integral part. Today this philosophy threatens you and me and this entire nation with the loss of the basic liberties that have made this country the finest place in the world to live in.

Socialism is based on compulsion, confusion and piecemeal engulfment, eventually leading into a Communistic state. Socialism might be likened to infantile paralysis. It is often insidious in its onset and can be readily confused with other less devastating conditions. Socialistic programs are often disguised by a "false face" of altruism and benevolence.

No nation would knowingly accept Socialism or Communism if they understood what it meant, and therefore it has to be introduced insidiously and through the emotions. The greatest emotional appeals made by the proponents of Socialism and Communism are those concerned with aspects of health. Throughout the world wherever the doctrine of Socialism has been introduced it has been the medical services that have been first attacked and Socialized. A perfect example of this is England where the medical profession first—and a few weeks ago the legal profession—fell under the Socialistic yoke. Today England is not jolly but rather labors under a full-fledged austerity program with ample distribution of poverty and want. Another beautiful example of this is a recent advertisement over the signature of the CIO National Health Committee—whatever that is—wishes to place the whole program on a compulsory basis run by Washington bureaucrats instead of the *voluntary* basis. And remember that it is the voluntary way that is today keeping the United States the healthiest large nation in the world and doing so without endangering our liberties or freedoms of choice.

What else is the medical profession doing to combat the trend toward Socialism?

Individual members of the medical profession are doing their best to eliminate from political advantage those persons who by their deeds, their attitudes and their company, indicate they are in favor of Socialism. Individual doctors are doing their best to support those candidates who believe that the voluntary way is the American way.

What further is the medical profession doing? It is seeing to it that *no one* lacks medical care. It is working in the great voluntary health organizations of Michigan to control disease. The medical profession is responsible for the organization of and the success of the greatest voluntary health insurance movement in the world today. In Michigan alone this system protects over four million persons and is growing every day. I speak of Blue Cross-Blue Shield and the many other health insurance programs available in Michigan today.

How many of you have some form of voluntary health insurance? How many of your friends? Millions of you—and yet the voluntary health insurance movement is less than fifteen years old in Michigan. In addition, over one million other persons in Michigan are in categories qualifying them for free medical care.

How is the medical profession organized, how does it co-operate with others in building a healthier America? The medical profession is organized on a county, state and national basis. It is absolutely voluntary. No doctor is forced to become a member of organized medicine. It is not necessary to be a member to practice medicine. That's quite a bit different from a closed shop, isn't it? The medical profession has and is constantly co-operating with every agency genuinely interested in the health of the people. It has worked with the Michigan Health Council and the Michigan Rural Health Conference, the Michigan Heart As-

sociation, the Michigan Foundation for Medical and Health Education, the Michigan Industrial Health Conference, the State Department of Health and many others, and in fact was responsible for the organization of these groups mentioned. There is no major health organization in Michigan, with the possible exception of the CIO National Health Committee—and I'm still wondering what that is—with which the medical profession both as individuals and as an organization has not worked harmoniously.

The medical profession in Michigan is determined that *no one who asks for it shall go without medical care in this state.*

My time is about up, but I should like to leave you with several thoughts:

Choose carefully on November 7. Then make your choice on your ballot. Let it be your choice—not that of any other persons or group.

However, a word of caution: think carefully before voting for any party or any candidate which is dedicated to any segment of the Socialistic pattern. Time and bitter experience have proven only too realistically that Socialism with socialized medicine as a starter leads to four avenues of "no return": (1) inferior quality of medical care, (2) additional staggering tax burdens, (3) abrogation of the personal liberties of free choice, and (4) a toehold for complete national socialization.

In closing, may I restate that which great American Benjamin Franklin said many years ago—and which holds so true today—"A people which would exchange its liberty for a fancied and transient security deserve neither liberty nor security."

Thank you so much—and let's meet with all good citizens at the polls next Tuesday, November 7.

MSMS

WHAT THEY SAY

"The September JOURNAL was the best I have ever seen."—G. K. SWARTZ.

"I appreciated the last issue of THE JOURNAL very much, and think that it did an excellent job of bringing our information on ACTH and cortisone up to date."—W. H. HURON.

"I wish to congratulate you on the excellence of the editorials in the October JOURNAL."—R. L. NOVY.

"The September JOURNAL on rheumatism and cortisone was a great contribution, and was a course of instruction unsurpassed."—J. J. JEFFREY.

New Influenza Virus Discovered

A new virus strain, which may prove to be another type of influenza, has been found in an epidemic of acute respiratory disease by the Armed Forces Epidemiological Board, according to an article appearing in the current issue of *Science*.

The new strain was discovered during an investigation conducted earlier this year in Michigan by the Board's Commission on Influenza, which operates under the auspices of the Army Surgeon General.

The Armed Forces Epidemiological Board furnishes advice to the Armed Forces in establishing uniform and effective epidemic prevention and control procedures. Established in 1941 as the Army Epidemiology Board, its function was expanded last year to study medical, operational, and research problems of the three services.

The Commission, one of nine now operating under the Board, has been searching for causes related to some of the other acute respiratory epidemics.

Dr. Thomas Francis, Jr., director of the Commission, Dr. J. J. Quilligan, Jr., and Dr. Elva Minuse co-operated in the studies. All are members of the Department of Epidemiology, School of Public Health, University of Michigan.

Studies up to the present have disclosed two clear-cut categories of influenza, A and B, as well as some rather pronounced differences between sub strains belonging to each of the types.

The new virus—which could be called Influenza C—was isolated during a mild outbreak of influenza associated with A-prime strains of virus which occurred in Ann Arbor last spring.

Efforts to relate the virus to other known respiratory diseases were unsuccessful. Studies with animal serums failed to show a relation to known influenza virus, to Newcastle disease virus, to mumps virus, the Texas, Ohio and Connecticut strains of Coxsackie virus, or to the pox groups of virus. All tests showed negative results to these common infectious diseases, indicating that the newly discovered virus seems to be serologically and immunologically distinct from previously identified strains of influenza virus.

Of particular interest was the testing of serums

(Continued on Page 1495)

From U. S. A. Surgeon General's office.

Saline Solution in Treatment of Burn Shock

THE Surgery Study Section of the National Institutes of Health has recommended to the Surgeon General of the Public Health Service that the use of oral saline solutions be adopted as standard procedure in the treatment of shock due to burns and other injuries in the event of large-scale civilian catastrophe.

The recommendation followed action taken at the January, 1950, meeting of the Surgery Study Section, when such treatment was approved in principle. Dr. Carl A. Moyer, a member of the Study Section, was designated at that time to prepare a memorandum suitable for submission to Dr. Norvin A. Kiefer, Director, Health Resources Division (now Health Resources Office), National Security Resources Board.

Dr. Moyer's memorandum, which was submitted to Dr. Kiefer, February 15, 1950, reads as follows:

"Since the publication of the experimental work of Dr. Rosenthal, Dr. Coller, et al, orally administered salt solutions have been employed in the treatment of burns at the University of Michigan Hospital, Ann Arbor, Michigan, at the Wayne County General Hospital, Eloise, Michigan, and at Parkland Hospital, Dallas, Texas. Personal clinical experience, in the above-named hospitals, has convinced me that the orally administered salt solutions are valuable adjunctive agents in the treatment of shock incident to burns, fractures, peritonitis, and acute anaphylactoid reactions. Certain factors are important in governing the effectiveness of the oral administration of salt solutions. They are as follows:

"1. The composition of the salt solution: The most palatable salt solution is made by dissolving 3 to 4 grams of sodium chloride and 2 to 3 grams of sodium citrate in each liter of water. If sodium citrate is not available, ordinary baking soda may be substituted for it.

"2. The concentration of salt should not be in excess of 140 milliequivalents of sodium per liter. If the concentration is above this, vomiting and diarrhea became important complicating factors.

"3. Whenever profound peripheral circulatory collapse is present, the intravenous route of administration must be used until peripheral blood flow has been reestablished. The salt solutions that we have found most satisfactory for this purpose are Hartmann's solution (Lactate-Ringer's solution) or plasma. In addition to the salt solution or plasma intravenously, whole blood is given concurrently whenever peripheral circulatory collapse exists. This materially implements the effectiveness of salt solutions.

"The slightly hypotonic salt solution is the only drinking fluid permitted the injured individual until the edema of the injured parts begins to subside. Certain exceptions to this rule have to be made during the hot weather of summer when it is sometimes necessary to permit the partaking of some non-salty water.

"As much as 10 liters of the hypotonic salt solution have been drunk in the twenty-four-hour period by adults who have been severely burned. Since salt solution has been substituted for water, as a drinkable fluid, no burned person who has lived for longer than three hours after being admitted to the hospital has suffered from anuria. The 'early toxemia phase' of the burns has also failed to appear, and the osmotic concentration of the plasma electrolytes has been well maintained.

"We feel that much more clinical observation and actual experimental work should be undertaken regarding the effectiveness of the basic principles of the supportive therapy of burns that have been so beautifully demonstrated by Dr. Rosenthal. It is obvious that the adoption of a more active program of investigation into the relative effectiveness of simple measures to combat shock would be of extreme importance to the Armed Forces and to the civilian population in the event of another war"

Because of the sharpened national emergency that developed during the summer of 1950, the Surgery Study Section, in approving Dr. Moyer's memorandum at its meeting on September 16, changed the last paragraph to read:

"While further clinical research concerning the effectiveness of oral salt solution in the treatment of burns and other injuries is certainly in order, there is already sufficient evidence to suggest that this form of treatment should be used in any large-scale disaster involving the civilian population."

The Surgery Study Section letter to the Surgeon General, dated September 16, 1950, reads as follows:

"It is my understanding that one of the functions of the Study Sections is to offer advice to the Surgeon General in fields of medicine lying within the special competence of the Study Section members. At the January, 1950, meeting of the Surgery Study Section, there was considerable discussion concerning the use of oral saline solutions in the treatment of burns and other serious injuries. It was the consensus of the Section at that time that, on the basis of the animal work which had been done by Dr. Rosenthal of the National Institutes of Health, and the clinical work which had been done by Dr. Carl A. Moyer, by the undersigned, and by others, the efficacy of such treatment had been definitely demon-

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Submitted by Naval Surgeon General Leonard A. Scheele, for general distribution as especially valuable in case of any large scale disaster:

"I would invite your attention to the very important fact that this recommendation will in no sense decrease the need for whole blood, and must not be construed as lessening in any way the importance of blood bank programs. It is our considered opinion, however, that information on sodium treatment might well be included immediately, as an emergency procedure, in first aid training programs."
—LEONARD A. SCHEELE, *Surgeon General*

strated and that, while there is need to stimulate additional research in this field, our present knowledge is sound enough so that action can be taken on this basis. Dr. Moyer was designated to draft a short memorandum expressing our point of view on this subject. Such a memorandum was prepared and furnished to Dr. Norvin C. Kiefer, Director, Health Resources Division, National Security Resources Board, on February 15, 1950. A copy of Dr. Moyer's memorandum is attached.

"In view of the more acute national emergency that has developed since Dr. Moyer wrote this memorandum, the Study Section, at its meeting on September 16, 1950, voted to recommend that the principles of treatment outlined in his memorandum be adopted for widespread use in any large-scale disaster involving the civilian population. Because of the present emergency situation, we have modified the last paragraph of Dr. Moyer's memorandum to read, 'While further clinical research concerning the effectiveness of oral salt solution in the treatment of burns and other injuries is certainly in order, there is already sufficient evidence to suggest that this form of treatment should be used in any large-scale disaster involving the civilian population.'

"You are at liberty to transmit this recommendation of the Surgery Study Section to the National Security Resources Board or to other proper agencies, and, if you see fit, to publish it. We feel strongly that it is important for the medical profession of the country and for those planning for the handling of potential disasters to be informed of the value of this simple and easily carried out form of treatment."

The letter was signed by Frederick A. Coller, M.D., University of Michigan, chairman of the Surgery Study Section. Members of the Study Section, in addition to Dr. Coller, are: Dr. Claude S. Beck, professor of neurosurgery, Western Reserve University; Dr. Loren R. Chandler, dean, Stanford University Medical School; Dr. Lester R. Dragstedt, professor of surgery, University of Chicago; Dr. Daniel C. Elkin, professor of surgery, Emory University; Dr. Carl A. Moyer, dean and professor of surgery, Southwestern Medical School, University of Texas; Dr. Harris B. Shumacker, Jr., professor of surgery, Indiana University Medical Center; Dr. Owen H. Wangensteen, professor of surgery, University of Minnesota; Dr. Allen O. Whipple, clinical director, Memorial Hospital, New York City; Dr. H. L. Skinner, chief of surgery, Staten Island Marine Hospital; Dr. Henry Beecher, professor of anesthesiology, Harvard University Medical School; Dr. J. Gordon Lee, chief of surgery, Mount Alto Hospital, Washington, D. C.; Dr. Howard R. Lawrence, chief of surgery, Francis E. Warren Air Force Base Hospital, Wyoming; and Dr. G. Halsey Hunt, Chief, Division of Hospitals, Public Health Service.

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*This does not represent a complete bibliography.

MSMS

CARDIAC HOUSEWIFE PROGRAM OF THE MICHIGAN HEART ASSOCIATION

(Continued from Page 1441)

held on consecutive Tuesdays and Thursdays in order that a week's interval may elapse in which the class members can make some of the suggested rearrangements. The course is not limited to meal preparation and kitchens, but also includes bedmaking, cleaning, dusting, and other household tasks. Request for an application blank is made by the patient to the Michigan Heart Association by letter or telephone.* The application blank contains a small space for the physician to indicate activities permitted the patient. This is for guidance of the instructors since there is no examination of patients or treatment. Upon completion of the application form, the patient is notified of the time and date of the class. The classes are open to women of all economic levels.

The Cardiac Housewife Program of the Michigan Heart Association is designed to be of aid to the physician in the management of his cardiac housewife patients. It will fill the doctor's prescription of "take it easy" by showing her *how* to take it easy, yet accomplish as much of her own work as possible.

*4421 Woodward Avenue, Detroit 1, Michigan. TEmple 1-6400.

Holiday Review

WE must always bear in mind that not only are the rules governing medical practice numerous, but that each law or ethical regulation is surrounded by emotional hazards.

For purposes then of a brief study, we can outline those duties as imposed by law as follows:

The doctor is not obligated to accept employment. The ability of the patient to pay or not to pay does not alter the situation.

Once the doctor has undertaken treatment he must continue to render such services as the advanced state of his profession, in his or similar localities, requires.

The doctor may refuse to treat a patient in a particular hospital.

The patient and the doctor may by agreement limit the terms and conditions of the implied contract.

The doctor shall be the judge of the necessity and the frequency of his visits. In case of implied neglect, however, the jury will be the judge. Other professional engagements do not excuse the physician for not rendering necessary services.

Gratuitous treatment in no respect qualifies the liability of the physician.

In case of temporary absence the patient must be notified and told who will be in charge of his care during his doctor's absence. If a partner, agent or employe is selected, the original doctor is still liable. If the recommended doctor is an independent practitioner, then the only responsibility is in selecting a competent physician.

Neither a doctor nor his patient need continue a contract longer than is pleasing to them, providing that the party desiring to terminate the relationship gives the other reasonable notice.

The medical profession is most anxious that the above rules shall be complied with. We believe that rendering the best medical care possible, at a fee within the patient's ability to pay, will avoid most legal entanglements. We commend the profession of the State of Michigan for the paucity of cases which have reached our Mediation Committee and our Ethics Committee. Although no plaudits are expected, this is the finest type of public relations any organization can practice.

We have viewed with alarm the marked increase in malpractice suits in certain sections of the country. Various reasons have been given, such as:

Ill-advised admissions concerning the medical care given.

Poor case records.

Inadequate x-rays.

Filing suit by the physician for his fee before the Statute of limitations has run its course.

Responsibility for the acts of others.

Exorbitant fees.

As a weapon of intimidation.

Negligence inasmuch as the doctor fails to keep abreast of recent advancements in medical care.

President's Message

In addition to knowing the above laws and the hazards surrounding them, the doctor of medicine must know and be guided by the "Principles of Medical Ethics" of the American Medical Association. These deal with the physician's deportment in and outside of the medical profession. It is not to be supposed that these regulations cover the entire field of medical ethics or that the physician is not under many obligations besides those set forth. The Golden Rule of "Do unto others as you would have them do unto you" must be incumbent on each physician in his deportment toward the public and his fellow practitioners.

The laws and ethics, as listed above, are primarily for the good of the public. Their enforcement should be conducted by the medical profession in such a manner as shall deserve and receive generalized endorsement. The cost is little but the reward is great.

As we regard 1950 in retrospect we believe the medical profession of Michigan has acquitted itself with honor. In many of its endeavors the Michigan State Medical Society has gone beyond the requirements of the laws and ethics herein quoted. For that reason the Holidays should bring much happiness and contentment in a job well done.

The officers of the Michigan State Medical Society wish every member a most pleasant Christmas, and in 1951 may we really see a world united in peace.

C E Umphrey M D

President, Michigan State Medical Society

ANNUAL COUNTY SECRETARIES—PUBLIC RELATIONS CONFERENCE

January 21, 1951

Book-Cadillac Hotel—Crystal Ballroom

Detroit, Michigan

WM. M. LE FEVRE, M.D.
Chairman of Secretaries

THEME

Organization and Communication—Key to Effective Medical Activity

TENTATIVE PROGRAM

MORNING—9:30 a.m. to 11:45 a.m.
W. M. LE FEVRE, M.D., Michigan, *Chairman*

A. Channels of Communication

1. From AMA and other national organizations to MSMS
   By EDWARD J. MCCORMICK, M.D., Toledo, Ohio, Trustee of American Medical Association.
2. From MSMS to County Medical Societies
   By C. E. UMPHREY, M.D., Detroit, President, Michigan State Medical Society.
3. From County Medical Societies to the people
   By HAROLD J. MEIER, M.D., Coldwater, Michigan.

B. Media of Communication

1. Motion Pictures, Radio and Television
   By JAMES E. LEWIS, East Lansing Production Director, Capitol Film Service.
2. Newspaper
   By JACK PICKERING, Detroit, Science Writer of *Detroit Times*
3. Public Speaking, Conversation, Telephone—Telegraph, and Letters (direct mail)
   By A. WESLEY ROWLAND, Alma, Michigan, Alma College.

NOON DAY DINNER—12:00 noon to 1:45 p.m.
R. J. HUBBELL, M.D., Kalamazoo, *Chairman*

C. Luncheon Speaker

MAJOR GENERAL GEORGE ARMSTRONG, M.C., Deputy Surgeon of the Army, Washington, D. C.—*"The Wartime Role of the M.D.—In and Out of Uniform."*

AFTERNOON 2:00 p.m. to 4:00 p.m.
L. W. HULL, M.D., Detroit, *Chairman*

D. Governmental and Economic Questions

1. Governmental Contacts and the Legislative Outlook for 1951
   By WILLIAM PALMER, Lansing, Exec. Secy., Michigan Petroleum Industries Committee.
2. Taxes and Insurance
   By ROBERT B. L. MURPHY, Madison, Wisconsin, Legal Counsel, State Medical Society of Wisconsin.
3. Medical Service in Labor Relations
   By EARL R. BRAMBLETT, Detroit, Labor Relations Department of General Motors Corporation.
4. Co-ordination of Medical and Health Organization—County and State
   By L. FERNALD FOSTER, M.D., Bay City, Secretary, Michigan State Medical Society.

Editorial

THE MICHIGAN HEART ASSOCIATION

THE MICHIGAN Heart Association is not yet two years old. Its second birthday will be February 17, 1951, the anniversary of its incorporation. Its Articles of Incorporation state that it is formed for the following purpose: ". . . the acquisition, dissemination and application of knowledge concerning the normal heart and circulation and the causes, diagnosis, prevention and treatment of disorders of the circulation and diseases of the heart, blood vessels and lymph vessels. . . ." A critical examination of the achievements of this infant organization reveals an astonishing record of accomplishments for one so young!

For the "acquisition of knowledge" the Michigan Heart Association actively supports both basic and developmental research projects in Michigan's medical schools and hospitals. A complete list of grants for 1950-1951 is listed elsewhere in this issue. It will be found that both the medical and the surgical aspects of heart disease are represented, that research work is being done in a number of different institutions, and that a number of different types of heart disease are under scrutiny. The M.H.A. in addition contributes substantially to research projects on the national level: twenty-five per cent of its income goes to its parent organization, the American Heart Association, one-half of this amount being earmarked for basic research throughout the nation. Qualified Michigan investigators can apply for help from this source as well.

For the "dissemination of knowledge" the Michigan Heart Association has organized a program of educational activities both lay and professional. The current issue of THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY largely devoted to heart disease, the Association's Annual Heart Day (March 17, 1951, program elsewhere in this issue), the Speakers Bureau offering topics on heart disease for the scientific meetings of County Medical Societies, the Association's information service and publicity activities for the public—all speak for themselves.

For the "application of knowledge" the Michigan Heart Association supports a limited community service program. Belonging in this phase of its activities are its support of the Michigan State Medical Society's rheumatic fever control program featuring the establishment of Rheumatic Fever Diagnostic and Consultation Centers within the reach of every patient and his family physician in the state, the Cardiac Housewife Program described elsewhere in this issue, the program in Industrial Cardiology.

The Michigan Heart Association was formed by a committee of the Michigan State Medical Society who deserve full credit for initiating the formation of a heart association in Michigan under the auspices of the medical profession. A distinguished group of lay members have contributed immeasurably to its success. In order to be relieved of the burdensome, inefficient and expensive job of raising the necessary funds independently, the Michigan Heart Association has chosen to become a member agency of the United Health and Welfare Fund of Michigan, Inc.

The Michigan Heart Association is a voluntary, privately supported health agency, and fully deserves your interest and your active participation.

—L. D. V.

CHRISTMAS REJOICINGS

THIS IS the month of the Christmas season with its universal felicitations and rejoicings. The Michigan State Medical Society, through The Council and THE JOURNAL, offers all the season's best hopes and joys to our members and their loved ones. May the anticipations of the New Year be the greatest blessings you desire and deserve.

We have reason for elation. The elections have removed from public office some of the ardent proponents of "National Compulsory Health Insurance": Senators Claude Pepper of Florida, Glen Taylor of Idaho, and Frank P. Graham of North Carolina lost in the primaries. The election carried away Representatives Andrew J. Biemiller of Wisconsin, George H. Wilson of Oklahoma, Neil J. Lineton of Illinois, Helen Gahagan Douglas of California, candidate for the Senate; and Senators Elbert D. Thomas of Utah, Francis Mey-

ers of Pennsylvania, and Millard Tydings of Maryland.

The election returned to office by overwhelming odds Senator Robert Taft of Ohio, and also all the friendly Republican members of both the Senate and House committees which handle the health insurance bills, except our very good advocate, Senator Forrest C. Donnell of Missouri.

The defeat of Senator Scott Lucas of Illinois, the majority leader, lends hope of a respite for a period. Senator Lucas belatedly disclaimed favoring "socialized medicine," but he was the administration leader, and medicine may well feel satisfied.

Such in very brief is another justification for the Season's happiest "God bless you."

WE HAVE THE RIGHT

THE AMERICAN Medical Association in October advertised to the public the merits of private enterprise and private practice of medicine. The Association has been soundly criticised by some for its efforts.

Mr. John D. Dingell, Congressman from Michigan, made a speech in Congress strongly critical of the Association's advertising program and of its campaign for defense. He reprinted this speech as coming from the *Congressional Record* with a headline of letters one-half inch high. "HELP FIGHT MEDICAL LOBBY TWENTY MILLION DOLLAR SMEAR CAMPAIGN." The idea very evidently is to discredit the American Medical Association and its motives.

Taxpayers' money was used to print Mr. Dingell's speech and other material in the *Congressional Record,* even though he did append the line "Not printed at Government expense." The *Record* is certainly printed at Government expense; the reprints may be different, but how about the Franking privilege in distribution of Congressmen's mail?

* * *

Mr. Oscar Ewing, Federal Security Administrator, in a speech before the American-Jewish Congress implied that the American Medical Association was practicing discrimination against the Jews. What object could he have but to bring discredit upon the American Medical Association?

Mr. Ewing's department had spent upwards of seventy-five millions of dollars up to 1948 in propaganda for the Federal plan of socialized medicine which they euphoniously call "Compulsory Health Insurance." Recently Mr. Ewing testified at a Congressional hearing that this was not only his privilege but his duty in loyalty to the administration.

* * *

Many newspapers throughout the country in late October carried a quarter page advertisement, slanderous and probably libelous, about the American Medical Association. The ad is in the form of a letter from a mother accusing the profession of opposing or defeating a list of nine programs, expressing false statements or half truths, but designed to place the profession in a wholly false and intolerable light. This was from the "CIO National Health Committee," which has placed itself on the list of "social planners," the Fabians of America.

The medical profession is attempting to maintain itself as a private and non-bureaucratic enterprise. But this is a fight not for ourselves alone. It is to save our nation from an encroaching Socialism, which is now vigorously threatening education, agriculture, banking and insurance.

The profession has contributed a picayunish amount of money, in comparison to Federal and other funds, to carry on this fight, but the money has been our own, not taxpayers' money wrongfully expended.

* * *

The Federal District Court of Oregon has announced its findings in the Government's case against the Oregon State Medical Society. The Court fully and completely vindicated the society and found no guilt. Some of these notes bear a tone of optimism. The following is quoted from the judge's notes, upon which the final opinion will be written: "Can it be that a profession may not defend itself by reorganization of its methods, by doing within the profession what has been compelled elsewhere by law; that, to reorganize and seek to preserve its independent status makes an organized profession and its leaders criminals and subject to the injunctive power of the courts?

"In short, *that organized medicine must remain a sitting duck while socialism overwhelms it?* I would not expect an American court to hold that."

"Constitutional Democracy is not a one-way road. Those seeking changes, radical or otherwise, may urge them. Those who believe in things as they are or who seek to retain them in modified form may oppose radical change, without becoming subject to the criminal laws. That certainly

includes vitally interested parties whose way of living, whose living itself, is threatened. This is entirely aside from considerations of public interest."

* * *

But now, after the election the medical profession is vindicated. Commentators and news anallists have credited the medical profession and the rural people for the setback which the progressing "welfare state" received. Opposition to the Brannan Plan, and to socialized medicine is credited with getting into the "Grass Roots" and bringing out the votes which retired some of the most active workers for the socialistic plans, and also gave our most active supporter a tremendous boost.

We are grateful for the results, and shall be on the alert for further "planned economy," "socialized medicine," "socialized agriculture," "socialized education," or others of the same ilk, all leading to the socialistic state.

PRESIDENT UMPHREY

ON SEPTEMBER 20, 1950, at Detroit during the Eighty-fifth Annual Session of the Michigan State Medical Society, Clarence E. Umphrey was installed as president. Dr. Umphrey was born March 9, 1896, graduated from High School, Yale, Michigan in 1915, and from Michigan State Normal College in 1917. He served in World War I from 1917-1918. He spent two years in Wayne University, premedical, and graduated from the Medical School in 1925. He was president of West Side Medical Society in 1931 and member of the Council, Wayne County Medical Society, 1935 to 1949. He was president of the Noonday Study Club, 1935-36, secretary of the Wayne County Medical Society, 1936-37, and president, 1937-38, then served five years on the Board of Trustees. He was president of the Wayne University College of Medicine Alumni, 1941-42. He has served on the Council, Michigan State Medical Society, 1938-49, when he was made president-elect. He was five years, 1944-49, on the Board of Directors of the National Physicians Association.

Dr. Umphrey's training for the surgical specialty was long and diverse: one year of internship in a teaching hospital, five years obtaining further surgical experience in a smaller hospital, one year on orthopedic staff and five years on the surgical outpatient staff at still another hospital. In 1945-46 he took a special basic science and surgical technique thirty-two-hour-per-week course for twelve months.

Dr. Umphrey is an untiring worker, as evidenced by his efforts on the Council, and his exhaustive study in the medico-economic and socialistic problems facing the country and the profession. His writings are extensive on that subject. Dr. Umphrey has attained F.A.C.S. and F.I.C.S., and this has all been accomplished while he was in the active practice of medicine. He is married and has two daughters.

ELECTIONS TO THE COUNCIL

AT THE ANNUAL meeting of the Michigan State Medical Society in Detroit, September 18-22, the following new officers were elected:

Duncan Bruce Wiley, Councilor 15th District, Utica, Michigan. He was born August 31, 1904, at Blenheim, Ontario. He had his premedical and medical training at the University of Western Ontario, London, Canada, and graduated in 1928. Internship at St. Joseph Hospital, Mt. Clemens, Michigan. He had postgraduate training at Cook County, Chicago, Illinois, 1928. He has practiced in Utica since 1929. He is a member of the Utica Rotary Club since 1929, and served as president, secretary, treasurer and director during that period. He was secretary of the Macomb County Medical Society and delegate of the Michigan State Medical Society for ten years. He has been on the National Conference of County Medical Society Officers, Michigan chairman since 1947, and has been area chairman for six states and member of the Executive Committee during that time. He is affiliated with St. Joseph Hospital in Mt. Clemens, Section of Obstetrics and Gynecology.

Wyman D. Barrett, Grosse Pointe, Michigan. Born in Canada, September 27, 1887. He was elected Councilor for the 16th District. His practice is in the David Whitney Building, Detroit, Michigan. He graduated at the University of Toronto in 1911. Internship at Harper Hospital, July, 1911, to July, 1913. He served twenty years with the late Dr. Angus McLean. He was a

first lieutenant in the first World War, doing surgery. He is now clinical professor of surgery at Wayne University Medical School. Has been president of the Detroit Academy of Medicine. He is chief of the Department of Surgery, Harper Hospital, consulting surgeon at St. Joseph's Mercy Hospital, Detroit Receiving Hospital, and Sigma Gamma Clinic, Detroit. He has published the following papers: "Primary Sarcoma of the Tongue," *Harper Hospital Bulletin;* "Multiple Primary Malignancies," *Harper Hospital Bulletin;* "Thyroid Carcinoma with Metastasis to the Groin," *Harper Hospital Bulletin;* "Multiple Primary Cancer—A study of Thirty-Six Patients," *Surgery, Gynecology and Obstetrics,* vol. 89, no. 6, December, 1949.

Robert Stevens Breakey, Councilor 2nd District, Lansing, Michigan. He was born August 10, 1898, at Ann Arbor, Michigan. He had his premedical and medical training at the University of Michigan, Ann Arbor, Michigan. Internship at University Hospital, Ann Arbor. He had postgraduate work at the University Hospital. He practiced at Ann Arbor (University Hospital) five years and at Grand Rapids one year. He has practiced at Lansing, since 1929. He is past president of Ingham County Medical Society, past president, Detroit Urological Society, member of American Urological Association, American Neisserian Medical Society, and past president, North Central Branch, American Urological Association. He is consultant in urology at E. W. Sparrow Hospital and St. Lawrence Hospital, Lansing, Michigan, and consultant, Memorial Hospital, Mt. Pleasant, Michigan, and St. Johns, Michigan.

George Willard Slagle, Councilor 3rd District, Battle Creek, Michigan. He was born September 1, 1909, Centerville, Ohio. He had his premedical and medical training at the University of Michigan, Ann Arbor, Michigan. Internship at Miami Valley Hospital, Dayton, Ohio, 1933 to 1934. Residency, Battle Creek Sanitarium in internal medicine, 1934 to 1937. Postgraduate training at Mayo Clinic, December, 1934, to December, 1935. Courses in American College of Physicians, 1939, 1941, 1946, 1947, and 1949. He was a Commander, M.C., U. S. Navy, during World War II, serving from December 13, 1941, to January 16, 1946. He is a member of the Citizens Committee of Battle Creek, director of Battle Creek Country Club and member of the Athelstan Club, member and Fellow of American College of Physicians, 1943, Calhoun County Medical Society, MSMS and AMA. He is affiliated with Leila Y. Post Montgomery Hospital, Community Hospital, and is consultant at Percy Jones General Hospital, Battle Creek, Michigan.

Reader Jenkins Hubbell, re-elected Councilor 4th District, Kalamazoo, Michigan. He was born September 8, 1896 at Wilmette, Illinois. He had his premedical and medical training at Northwestern University and graduated 1923. Internship at Wesley Memorial Hospital, Chicago, Illinois, 1922 to 1924. Postgraduate training with B.A. Thomas, M.D., Philadelphia, in urology, 1929 to 1930. He served in World War I as a private. He is a member of county, state and national medical associations, American Urological Association and is certified by the American Board of Urology. He has hospital affiliations with active staff, Borgess and Bronson Hospitals, Kalamazoo, Michigan, consulting staff of Kalamazoo State Hospital, Fairmont Hospital, Del Vista Sanitorium, Plainwell, Michigan. His most recent published paper is "Prostatic Surgery," JMSMS. He was vice chairman of the Council for three years.

Otto O. Beck, President-Elect, Birmingham, Michigan. He was born November 17, 1893, Grand Island, Nebraska. He had his pre-medical training at Central Wesleyan College, Warrenton, Missouri. Medical training at Missouri University and Northwestern University. Internship at Harper Hospital, Detroit, Michigan. He served in World War I as a private. He is a member of Birmingham Exchange, Trustee Michigan Hospital Service, Oakland County Medical Society, MSMS and AMA. He was medical director of Orenburg (Russia) District for the American Relief Administration, 1922, and chairman, MSMS Council. He is affiliated as a staff member with St. Joseph Mercy Hospital, Pontiac, Michigan.

THE MSMS RHEUMATIC FEVER CONTROL PROGRAM

MICHIGAN is believed to be the only state in the Union where a program for the control of rheumatic fever and rheumatic heart disease has been initiated and carried out under the auspices of the state medical society. In many other states

and localities rheumatic fever programs—the general need for which cannot be denied—have been sponsored by lay groups or by official agencies, frequently by-passing the role of the family physician.

The Michigan plan is based on the premise that the family doctor is the key person in any disease control program of this type because he is first to observe the first signs of illness and it is his responsibility to guide his patient to a successful recovery. The Michigan plan makes available to him—and through him to his patients—the use of its diagnostic and consultation facilities where he can obtain help and advice for his more troublesome cases, in management as well as in diagnosis.

Basically the plan is educational; it aims to make all physicians better diagnosticians, better clinicians and more expert in the difficult management of a notoriously long-term disease. It aims to educate the public in the early recognition of signs of illness and in early visit to the doctor for diagnosis.

For the patient the MSMS Rheumatic Fever Diagnostic and Consultation Centers offer a complete "work-up" by a group of qualified consultants, on referral by the family physician. No child in Michigan need forego the advantages of a thoroughgoing clinical and laboratory examination because the Rheumatic Fever Centers are strategically located throughout the state in the larger medical centers, within easy reach.

To the referring physician the Rheumatic Fever Centers render a complete report of the physical examination, laboratory findings and diagnosis of the board of examiners, together with specific advice on management. The patient remains his patient to care for and look after. In many cases the Centers have acted as a sort of court of appeals, perhaps confirming or denying a diagnosis (sometimes forced by the parent), perhaps supporting the referring physician's recommendation for such procedures as tonsillectomy or convalescent care.

To the consultants who actually work in the Center — pediatricians, cardiologists, radiologists and others—it affords an opportunity to study a greater number of cases in more detail, and to discuss their findings with their colleagues. Rheumatic fever often is a baffling disease and each case is likely to pose a number of problems for solution.

The Rheumatic Fever Diagnostic and Consultation Centers can be of inestimable value to the practicing physician in the diagnosis and care of rheumatic fever and rheumatic heart disease. The success of the program depends on the active support by every member of the profession, either by referring their difficult cases to the Centers or by participating in the operation of the Centers. It shall not be said that the doctors are incapable of concerted effort and action.

L. D. V.

MSMS

THE ACUTE RHEUMATIC STATE

(Continued from Page 1419)

cardiac catheterization will prevent undue hazard in diagnosis. The functional murmur and/or neurocirculatory asthenia in the older child are probably the conditions most often confused with the mild or smoldering active rheumatic fever. Close and long clinical observation with the use of all laboratory aids, psychiatric consultation will finally decide the issue; nevertheless the nervous child with rheumatic fever may be frequently co-existent.

Other Conditions.—There are many unrelated diseases having some clinical attributes of rheumatic fever. Indeed their number may be as large as the perspicacity of the examiner. For example poliomyelitis early masquerades at times as rheumatic fever, but this disease actually does not give as much arthralgia as myalgia; the differential especially with spinal tap offers little difficulty. Typhoid fever is another acute infection with myalgia, arthralgia, even arthritis; course, cultures, Widal, effect of chloromycetin clarifies the problem. Other infections that occasionally offer diagnostic problems are bacillary dysentery, meningitis, especially meningococcic, and brucellosis; the latter if unsuspected may "pass" for a long period as rheumatic fever. Sickle cell anemia and leukemia often give arthralgias and murmurs but hemogram and bone marrow easily clinch these diagnoses. We have already mentioned the possible confusion of acute appendicitis and the peritoneal manifestation of acute rheumatic fever.

The national health service drew the line at buying Britons their bath salts. Neither, said the health ministry, will it honor prescriptions for lotions to make mosquitoes go away. This also applies to vanishing cream, shaving soap, tooth paste, talcum powder, and hair tonic. (*Chicago Daily Tribune,* Aug. 5, 1950.)

Second Michigan Industrial Health Day

April 4, 1951

Rackham Memorial Bldg.
100 Farnsworth Ave.
Detroit 12, Michigan

Sponsored by the Michigan Association of Industrial Physicians and Surgeons; Wayne University College of Medicine; Michigan State Medical Society's Committee on Industrial Health; Division of Industrial Health of the Michigan Health Dept.; Medical School of the University of Michigan; Michigan State Association of Industrial Nurses; the School of Public Health of the University of Michigan, and the Michigan Industrial Hygiene Society.

General Chairman for the Day
Carl Hanna, M.D., Detroit

PRELIMINARY PROGRAM

Morning Session

A.M.

9:00 **Registration:** Rackham Memorial Bldg., Main Auditorium.

9:30 **"Introduction To the Day's Activities."**
Presiding, Clifford H. Keene, M.D., Medical Director, Kaiser-Frazer Corp., Willow Run, Michigan.

9:40 **"New Developments in Industrial Surgery."**
Harry E. Mock, Jr., M.D., Northwestern University, College of Medicine, Department of Surgery, Chicago, Illinois.

10:00 **"Developments in Industrial Nursing."**
Helen De Coursey, R.N., Kelsey Hayes Wheel Company, Detroit.

10:20 **"The Rising Toll of Obesity in Industry."** America's number one health problem.
Alfred W. Pennington, M.D., Medical Department, E. I. DuPont Co., Wilmington, Delaware.

10:40 **"Beryllium Poisoning."** The newest major occupational disease.
Oscar A. Sander, M.D., Marquette University, College of Medicine, Milwaukee, Wisconsin.

11:00 **"International Industrial Medicine."** The United States is carrying Industrial Medicine to other lands.
Robert C. Page, M.D., General Medical Director, Standard Oil Co. of New Jersey, New York, N. Y.

11:45 **Discussion Leader:**
Gordon H. Scott, Ph.D., Dean of Medical College, Wayne University, Detroit, Michigan.

P.M.

12:00-2:00 **Lunch Period:** (The dining-rooms of nearby Sheraton Hotel are readily accessible)

Afternoon Session

Presiding, Harley L. Krieger, M.D., Medical Director, Ford Motor Co., Dearborn, Michigan.

P.M.

2:00 **"Defenses Against Atomic Bombing."**
Donald S. Leonard, Director of Civil Defense, East Lansing, Michigan.

3:00 **"Medical Responsibilities in Atomic Bombings."**
James H. Sterner, M.D., Associate Medical Director, Laboratory of Industrial Medicine, Eastman Kodak Co., Rochester, N. Y.

4:00 **Discussion Leader and Demonstrator of Radio Activity Measurement Equipment.**
Homer S. Myers, Vice President, Radioactive Products, Inc., Detroit, Michigan.

4:30 **Annual Business Meeting**—Michigan Association of Industrial Physicians and Surgeons.
Presiding, Joseph L. Zemens, M.D., President of the Michigan Association of Industrial Physicians and Surgeons, Detroit, Michigan, Rackham Memorial Building.

Evening Sessions

6:00 **Cocktails:** Available in the Sheraton Hotel.

Annual Banquet (informal)

7:00 Toastmaster—Clarence E. Umphrey, M.D., President, Michigan State Medical Society, Detroit, Michigan.

"The Industrial Worker's Better World."

Lillian M. Gilbreth, M.D., Consulting Industrial Engineer, Montclair, New Jersey.

The Inauguration of the Twenty-Five Years Occupational Health Service Group, and the Presentation of Certificates. Joseph L. Zemens, M.D., presiding.

All members of the Michigan State Medical Society are cordially invited to attend.

The Michigan Heart Association

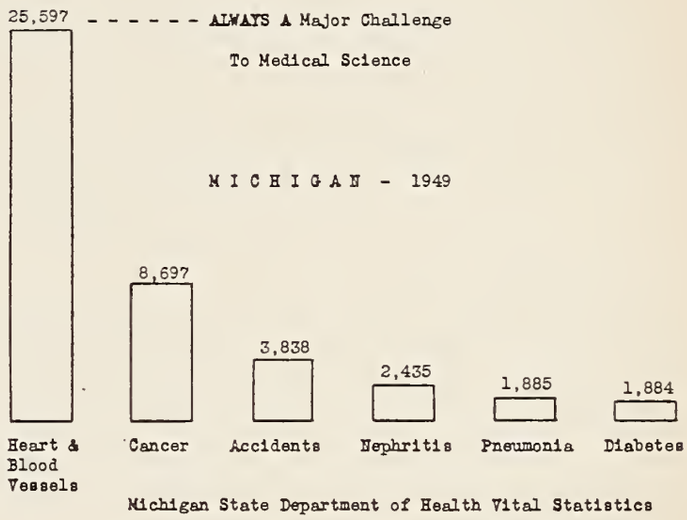
A Story of Dynamic Progress

THE Michigan Heart Association, in a little more than a year of operation, has become one of the major front line organizations in the nation today fostering studies in America's number one health problem—heart disease. During the past several months the Michigan Heart Association has written a dramatic story of what can be accomplished by concerted co-operative effort toward the control of heart disease in Michigan.

In order that we may fully appreciate the time and effort expended in organizing an association to fight heart disease in this state, it is necessary to briefly review the origin of the Michigan Heart Association from the first informal organizational meeting in the summer of 1948 to February, 1949, when the Michigan Heart Association was officially incorporated as a nonprofit organization under the laws of the State of Michigan.

Prior to the formation of a heart association in Michigan, the only organization in the state conducting activities into the problems of heart disease and rheumatic fever was the Michigan State Medical Society. The medical society exchanged considerable correspondence with the American Heart Association concerning the possibility of forming a Michigan Heart Association, representative of both professional and lay groups, which would be able to conduct a broader and more continuous campaign against diseases of the heart and circulation.

Accordingly, on August 11, 1948, the first informal meeting, to consider the need for the formation of a Michigan Heart Association, was held in Lansing, Michigan, under the chairmanship of L. Fernald Foster, M.D., of Bay City, secretary of the Michigan State Medical Society. In addition to Dr. Foster, the meeting was attended by Carleton Dean, M.D., director of the Michigan Crippled Children Commission; Warren B. Cooksey, M.D., Detroit Heart Club; Frank Van Schoick, M.D., chairman, Rheumatic Fever Control Committee of the Michigan State Medical Society; P. L. Ledwidge, M.D., H. H. Riecker, M.D., E. I. Carr, M.D., L. P. Ralph, M.D., members of the Michigan State Medical Society; Mrs. Hugh Wilson; and Messrs. W. Pierce and Earl Lippincott of the United Health and Welfare Fund of Michigan. After various aspects of the formation of a heart association were discussed, the group recommended to the Council of the Michigan State Medical



Society "that it proceed at once with plans to organize a Michigan Heart Association." A committee, from those present, was appointed to meet with delegates of the American Heart Association on September 18, 1948, to discuss the Michigan project and to develop plans for future co-operation with the national organization.

Shortly thereafter, E. F. Sladek, M.D., president of the Michigan State Medical Society, acting under instructions from the Council of the medical society, appointed a committee to organize a Michigan Heart Association. This committee met in Lansing, Michigan, on November 3, 1948, at which time Dr. L. F. Foster reviewed the work of the Michigan Rheumatic Fever Control Program from 1945 through 1948. Dr. Foster praised the Michigan Society for Crippled Children and Adults, Inc., for its generous aid in providing financial support to the Rheumatic Fever Program during this three-year period. He also pointed out that greater advantage would accrue to the people of Michigan through the formation of a Michigan Heart Association and that through affiliation with the American Heart Association, a continuous program in the study of heart disease could be inaugurated in Michigan.

Warren B. Cooksey, M.D., of Detroit, was elected chairman of this organizational committee, and plans were made for the immediate formation of a Michigan Heart Association.

The second meeting of the organization committee met on December 22, 1948, and the name "Michigan Heart Association" was officially adopted. Through unanimous approval, the committee also voted that the Articles of Incorporation be filed with the Michigan Securities and Exchange Commission.

Through the generosity of the Wayne County Medical Society, office space was made available to the Michigan Heart Association at the David Whitney House, headquarters of the Wayne County Medical Society, 4421 Woodward Avenue, Detroit. Headquarters of the Michigan Heart Association have been maintained at this address at a very minimal cost.

When the final meeting of the organization committee was held in Detroit on January 26, 1949, its ranks had been considerably enlarged through the addition of a number of interested lay persons. The Articles of Incorporation were signed by the members of the organization committee at this eventful meeting.

The signers of the Articles of Incorporation were unanimously elected to the first Board of Trustees of the Michigan Heart Association, and it held its initial meeting immediately following the last meeting of the organization committee. Mr. C. E. Wilson, president of the General Motors Corporation, was elected chairman of the Board of Trustees and the following officers were also elected: president, W. B. Cooksey, M.D.; president-elect, Paul Barker, M.D.; vice president, Frank Van Schoick, M.D.; vice president, Bethany L. Wilson; secretary, L. Fernald Foster, M.D.; treasurer, Charles T. Fisher, Jr. In addition, an Executive Committee and a Finance Committee were appointed.

Mr. Frank Isbey, as a member of the Finance Committee, was charged with the responsibility of implementing a drive for funds in co-operation with the United Health and Welfare Fund and the United Foundation.

Plans were also authorized by the Board of Trustees for the secretary to make application to the American Heart Association for affiliate membership.

On February 17, 1949, the Michigan Heart Association was officially incorporated as a non-profit organization under the laws of the State of Michigan.

A few months later, on July 1, 1949, the Michigan Heart Association became an official affiliate of the American Heart Association. Under the affiliation agreement the Michigan Heart Association contributes 25 per cent of all funds received to the national association for use in research and educational programs in the cardiovascular field. In return, the people of Michigan and the Heart Association of this state will share in and benefit from the activities of the American Heart Association.

It is also important to point out that the Michigan Heart Association is a member agency of the United Health and Welfare Fund of Michigan (United Foundation in Detroit) and, as such, co-operates with other nonprofit agencies throughout the state in a united appeal for funds.

Since February of 1949 the funds contributed to the Michigan Heart Association by the people of Michigan have made possible the financial sponsorship of twenty vital research, education, and community service projects in diseases of the heart, eighteen of which are currently being conducted in our state. During the 1950-1951 fiscal year, the Michigan Heart Association has allocated approximately $108,000.00 for various projects. More than half of this amount has been assigned to medical schools, hospitals and other institutions throughout Michigan for research studies in diseases of the cardiovascular system (See Page 1401.).

The balance has been designated by the Association for the use of educational and community service projects, such as the Rheumatic Fever Control Program of the Michigan State Medical Society (the Rheumatic Fever Program also receives financial aid from the Michigan Society for Crippled Children and Adults and the Michigan Chapter of the Arthritis and Rheumatism Foundation). Other educational and community service projects include the Industrial Cardiology Program, the Cardiac Housewife Program and the Association's public information program.

The Cardiac Housewife Program, a study of work simplification in the home to develop ways and means of conserving the time and energy of the housewife whose working capacity is limited by heart disease, has met with dynamic success. The Michigan Heart Association is now offering classes in work simplification to any woman with a

cardiac disorder at no cost whatsoever to the patient. The classes are made possible through funds received from the United Fund Campaigns over the state. The course of instruction is based upon an extensive six-month study conducted by the heart association in co-operation with the Home Economics Department of Wayne University. Plans are presently being developed to extend this service to every community in Michigan through the Department of Home Economics at Michigan State College.

The Association's Public Information Program is designed to increase public understanding of heart disease. The program provides the people of Michigan with information relative to the care of their hearts and the new medical and surgical techniques being perfected for the benefit of the heart patient. It also keeps the public informed of the many research, educational, and community service projects being supported, in whole or in part, by the Michigan Heart Association.

Doctors of medicine (and as a result, the people of Michigan) also benefit from this program by receiving the very latest scientific information regarding current advances in the diagnosis, treatment and control of heart disease.

It is important to remember, however, that each and every project contributes in full measure to the care, diagnosis or treatment of all heart patients and that the continuation of these research, education, and community service projects is dependent upon funds received by the Michigan Heart Association from the United Fund Drives.

Progress in any field of endeavor has a price tag. For instance, industrial progress. It cost millions to develop today's modern, efficient, mass-production industrial plants. It also took millions to develop jet propulsion, radar and other momentous technical marvels of our time.

Medical progress has a price tag, too. The conquest of past scourges like diphtheria, typhoid fever and smallpox, which fifty years ago snuffed out so many hundreds of lives, took money. The discovery and mass production of such drugs as penicillin and sulfa—powerful agents against infections—took money—and a lot of it.

It is only inevitable then, that progress in the work against heart disease, this country's number one health problem, is also geared to the expenditure of money. Future progress of the Michigan Heart Association will be governed by the response of the professional and lay people of Michigan in meeting the challenge of heart disease. The fight to combat mankind's supreme enemy, heart disease, can only be won by paying the price of progress. Its conquest will be one of mankind's greatest triumphs.

The essential and beneficial projects currently being conducted by the Michigan Heart Association provide a few significant examples of recent successes. These projects are sign posts along the highway of progress pointing to a more hopeful future for those afflicted so that they may live longer, happier and more useful lives.

MICHIGAN HEART ASSOCIATION

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President-elect.....Douglas Donald, M.D.
Vice President.....Frank Van Schoick, M.D.
Vice President.....Mrs. Hugh Wilson
Secretary.....L. Fernald Foster, M.D.
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Douglas Donald, M.D., (ex officio)

Committee on Occupational Cardiology

Warren B. Cooksey, M.D., *Chairman*
F. Janney Smith, M.D.
E. A. Irvin, M.D.

MICHIGAN HEART ASSOCIATION

The Michigan Heart Association is a voluntary agency interested in the problems of diseases of the heart and blood vessels. Its program is one of education, research, and community service. The Michigan Heart Association is a member agency of the United Health and Welfare Fund.

The Articles of Incorporation of the Michigan Heart Association state, in part:

"The study of and acquisition, dissemination, and application of knowledge concerning the normal heart and circulation, and the causes, diagnosis, prevention, and treatment of disorders of the circulation and diseases of the heart, blood vessels and lymph vessels; the development and application of knowledge that will prevent such disorders and diseases; the gathering and publication of information upon all aspects of such disorders and diseases; including studies of occupations suitable for patients with diseases or disorders of the heart or circulation; the encouragement of the establishment of special dispensary facilities for patients with such diseases, and of facilities for adequate convalescent care of such patients and the promotion of permanent institutional care for such of them as are hopelessly incapacitated for self-support; and the encouragement, establishment and assistance of local associations and committees with similar purposes and to do any and all acts, necessary, convenient or proper in furtherance of the aforesaid purposes and objects, provided, however, that this corporation shall not be empowered to carry out any purpose or object or to do any act in pursuance thereof involving pecuniary gain or profit for its members or associates."

Membership in the Michigan Heart Association includes membership in the American Heart Association.

Members of the Michigan State Medical Society are invited to join.

MICHIGAN HEART ASSOCIATION
4421 Woodward Avenue
Detroit 1, Michigan

APPLICATION FOR ANNUAL (VOTING) MEMBERSHIP

NAME .....
(Please Print)

ADDRESS .....

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Detroit—March 14-15-16-17, 1951

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MICHIGAN STATE MEDICAL SOCIETY

Eighty-fifth Annual Session

DIGEST OF PROCEEDINGS OF THE HOUSE OF DELEGATES

MONDAY MORNING SESSION

September 18, 1950

The first meeting of the House of Delegates, Michigan State Medical Society, convened at the Book-Cadillac Hotel, Detroit, Michigan, September 18, 1950, at 10:15 a.m., R. H. Baker, M.D., Pontiac, Speaker, presiding.

I. Record of Attendance

Office	*Officer*	*Meetings* 1st	2nd	3rd	4th
Speaker	R. H. Baker	x	x	x	x
Vice Speaker	J. E. Livesay	x	x	x	x
Secretary	L. Fernald Foster	x	x	x	x
Immediate Past President	E. F. Sladek	x	x	x	x
County	*Delegate*				
1. Allegan	L. F. Brown	x	x	x	x
2. Alpena-Alcona-Presque Isle	E. S. Parmenter	x	x	x	x
3. Barry	A. B. Gwinn	x	x	x	–
4. Bay-Arenac-Iosco	O. J. Johnson	x	x	x	x
	W. S. Stinson	x	x	x	–
5. Berrien	D. W. Thorup	x	x	x	x
6. Branch	R. L. Wade	Not	Represented		
7. Calhoun	H. C. Hansen	x	x	x	x
	G. W. Slagle	x	x	x	x
8. Cass	S. L. Loupee	Not	Represented		
9. Chippewa-Mackinaw	B. T. Montgomery	x	x	x	x
10. Clinton	F. W. Smith	x	x	–	–
11. Delta-Schoolcraft	W. A. LeMire	x	x	x	x
12. Dickinson-Iron	D. R. Smith	x	x	x	x
13. Eaton	G. C. Stucky	x	x	x	–
14. Genesee	F. A. Barbour	–	–	x	x
	F. W. Baske	x	x	x	x
	C. W. Colwell	x	x	x	x
	F. D. Johnson	x	x	–	–
	C. K. Stroup	x	x	x	x
15. Gogebic	J. R. Franck	x	x	x	x
16. Grand Traverse-Leelanau-Benzie	D. G. Pike	x	–	x	x
17. Gratiot-Isabella-Clare	M. G. Becker	x	x	x	x
18. Hillsdale	L. W. Day	x	x	x	x
19. Houghton-Baraga-Keeweenaw	T. P. Wickliffe	x	x	x	x
20. Huron	C. W. Oakes	x	x	x	x
21. Ingham	R. S. Breakey	x	x	x	x
	L. G. Christian	x	x	x	x
	H. W. Wiley	x	x	x	x
22. Ionia-Montcalm	W. L. Bird	x	x	x	x
23. Jackson	E. H. Corley	x	x	x	x
	J. D. Van Schoick	x	x	x	x
24. Kalamazoo	R. J. Armstrong	x	x	x	x
	W. A. Scott	x	x	x	x
	R. W. Shook	x	x	x	x
25. Kent	L. C. Carpenter	x	x	x	x
	G. W. DeBoer	x	x	x	x
	J. W. Logie	x	x	x	x
	W. B. Mitchell	x	x	x	x
	A. A. Van Solkema	x	x	x	x
	A. V. Wenger	x	x	x	x
26. Lapeer	D. J. O'Brien	x	x	x	x
27. Lenawee	R. E. Dustin	x	x	x	x
28. Livingston	H. C. Hill	x	x	x	x
29. Luce	E. H. Campbell	Not	Represented		
30. Macomb	D. B. Wiley	x	x	x	x
31. Manistee	E. B. Miller	x	x	x	x
32. Marquette-Alger	N. J. McCann	Not	Represented		
33. Mason	E. B. Boldyreff	Not	Represented		
34. Mecosta-Osceola-Lake	David N. Kilmer	x	x	x	–
35. Menominee	J. R. Heidenreich	x	x	x	x
36. Midland	R. S. Ballmer	Not	Represented		
37. Monroe	T. A. McDonald	x	x	x	x
38. Muskegon	R. D. Risk	x	x	x	x
	N. W. Scholle	x	x	x	x
39. Newaygo	B. L. Masters	x	x	x	x
40. North Central	C. G. Clippert	x	–	x	–
41. Northern Michigan	J. R. Rodger	x	x	x	x
42. Oakland	E. B. Cudney	–	–	x	x
	H. A. Furlong	–	x	x	–
	C. R. Gatley	x	x	x	x
	J. M. Markley	x	x	x	x
	P. E. Sutton	x	x	x	–
43. Oceana	W. G. Robinson	–	–	x	–
44. Ontonagon	W. F. Strong	x	–	x	x
45. Ottawa	K. N. Wells	x	x	x	x
46. Saginaw	C. E. Toshach	x	x	x	–
47. Sanilac	R. K. Hart	Not	Represented		
48. Shiawassee	C. L. Weston	x	x	x	x
49. St. Clair	W. H. Boughner	x	x	x	x
50. St. Joseph	R. A. Springer	x	x	x	x
51. Tuscola	L. L. Savage	x	x	x	x
52. Van Buren	W. R. Young	x	x	x	x
53. Washtenaw	P. S. Barker	x	x	x	x
	O. K. Engelke	x	x	x	x
	B. M. Harris	x	x	x	x
	H. H. Riecker	–	x	x	x
	R. W. Teed	x	x	x	x
54. Wayne	W. W. Babcock	x	x	x	x
	H. E. Bagley	x	x	–	–
	D. C. Beaver	x	x	x	x
	C. D. Benson	–	–	–	x
	E. A. Bicknell	x	x	x	x
	O. A. Brines	x	x	x	x
	W. L. Brosius	x	x	x	x
	C. L. Candler	x	x	x	x
	E. G. Cochrane	x	–	x	x
	M. A. Darling	x	x	x	x
	H. F. Dibble	x	x	x	x
	E. F. Dittmer	x	x	x	x
	Douglas Donald	x	x	x	x
	H. B. Fenech	x	x	x	x
	E. H. Fenton	x	x	x	–
	R. F. Fenton	x	x	x	x
	C. K. Hasley	x	x	x	x
	L. T. Henderson	x	x	x	x
	D. H. Kaump	x	x	x	x
	E. D. King	x	x	x	x
	E. G. Krieg	x	x	x	x
	H. J. Kullman	x	x	x	x
	J. J. Lightbody	x	x	x	x
	J. E. Lofstrom	x	x	x	x
	E. C. Long	x	x	x	x
	K. M. McColl	x	x	x	x
	N. D. McGlaughlin	x	x	x	x
	G. T. McKean	x	x	x	x
	J. G. Molner	x	x	–	x
	L. J. Morand	x	x	x	x
	R. L. Novy	x	x	x	–
	C. I. Owen	x	x	x	x
	G. C. Penberthy	x	x	x	x
	A. Hazen Price	x	x	x	x
	C. S. Ratigan	–	x	x	x
	W. S. Reveno	x	x	x	–
	J. H. Schlemer	x	x	x	x
	E. D. Spalding	x	x	x	x
	E. C. Texter	x	x	x	x
	Arch Walls	x	x	x	–
	F. A. Weiser	x	x	x	x
55. Wexford-Missaukee	R. V. Daugharty	–	–	x	–

THE SPEAKER: At this time I would like us to take cognizance of the fact that 118 of the members of the Michigan State Medical Society have died since last year's session. The list is so great I will not read their names. However, not the least among these is the name of our past Speaker of the House for five years, President of the Michigan State Medical Society, and a worker whom we all admired, loved and revered, Dr. P. L. Ledwidge. May I ask you at this time to stand for a moment in silence in memory of these gentlemen?

(The House of Delegates arose for a moment of silence.)

The Vice Speaker: It is my pleasure at this time to introduce to you R. H. Baker, M.D., of Pontiac, Speaker of the House of Delegates.

II. Speaker's Address

By R. H. Baker, M.D., Pontiac

Each year, your speaker is given this opportunity to address you. My remarks shall be at random, in reference to problems facing our profession. Some of these we are now meeting actively. Some will be approached by resolution at this session of the House of Delegates and some we just ponder and perhaps have prepared no solution.

I am particularly mindful of the stimulating leadership and provocative suggestions made by your Speakers in the last four years, and of the officers who addressed you at these sessions of the House. I find, in reviewing their remarks, that we are all thinking along the same lines, because we all have, in some way, faced many of the challenges enumerated. But each of us, in our proud individualism, may arrive at somewhat different solutions for the same problem. And each gives different weight to them.

The onset of open war in Korea and its threatened implications, may seem to have put aside the immediate threat of the Compulsory Health Insurance sponsors.

I am still greatly concerned, whether we are meeting this threat of State Controlled Medical Practice to the best advantage. Some very thoughtful citizens in the United States sincerely believe that if Voluntary Hospital and Medical Insurance is good, then complete coverage by a Government Sponsored—Tax Supported—Insurance Program, will answer better, the many problems of cost and distribution of which we are well aware.

I am proud that Michigan is in the vanguard in answer to this philosophy of government medicine. We have gone far in answering the criticism that medical security is not available under a Voluntary Insurance program. We have extended our coverage to medical care in hospitals and extended our policies to four times the period originally covered by Blue Shield.

A few figures should be of interest. During the year 1939—medical coverage under Voluntary Insurance in the United States increased 31 per cent. In ten years Blue Cross has grown from less than 4.5 million to 34 million.

Commercial coverage on Medical and Surgical Insurance, the last 10 years, increased 14.9 million. In the same period—Blue Shield increased 14.5 million.

Medical coverage, alone, increased 2.7 million in commercial coverage, and 8.5 million through Blue Shield.

And now there are seventy-one doctor-sponsored plans in the United States and Territories.

These figures alone should be ample proof of the ability of Private Enterprise in Medical Practice, to provide and extend medical care to the American people, and their acceptance in such increasing numbers confirms their ability to pay.

The advocates of Federal Medicine are sure this proposed system is best. They claim, only by a tax supported medical scheme can the nation be covered. We doubt the nature of medical care under such a program. And we challenge the cost and method of administration of Federal Bureaucratic medicine.

In a recent article by Rebecca West *(Ladies Home Journal,* September, 1950) entitled—"Can a Nation Afford Health for All Its People," the author makes a frank appraisal of the British National Health Service. She emphasizes one of the greatest faults in their plan was *lack* of *time* to properly plan. And she warns of the errors that are inevitable when any political party —hurriedly launches a Health Service plan and then, when their term of power in office is limited—they become staunch defenders of their plan *including* all its faults.

I have always maintained we should be cautious in making too close comparisons between British and American Medical Practice. I think this article will explain my point—Britain had reasons for adopting their plan. How far are their basic reasons applicable to the United States? In the body of this article the Editors have inserted this quotation: "Reformatory measures are hailed as cure-alls by people who have a happy confidence in the perfectibility of human nature, and no discouraging acquaintance with history to dim it." This quotation reminds me of one from Patrick Henry—"I have but one lamp by which my feet are guided, and that is the lamp of experience. I know of but one way of judging the future, and that is by the past." I believe we have some past experience in America and abroad—by which to judge the future in Medical Practice. But if it be true that we are near to embarking on a brand new experiment in America let us heed Rebecca West's advice and take *time* to study and plan.

I am one who, in recent years, has modified a "stand pat" individualism for a more flexible concept. Evolution of our social thinking forces us to such changes. We in Michigan Medicine, were pioneers in this changing thought (I claim no credit for my early conservatism in appraising the Blue Shield movement).

I feel no disgrace in being conservative. We might all judge ourselves as being in one of these categories:

Reactionary—one who would fight progress and return to the past.

Conservative—one who would value the best we have and try to retain it.

Progressive—the conservative who while retaining the good of today is alert to social, scientific and economic progress.

Radical—one who would destroy all we have and offer nothing tangible in return. American doctors are conservative, but their medical practice is progressive.

I go along with our present expanding effort to meet the demands of health care by Voluntary Insurance—but I invite your thoughtful consideration of all points of view in charting our forward course.

What are some of the considerations focused in the public mind, by this major conflict in these philosophies concerning medical care to the nation? I will briefly mention some we are attacking actively and some which must continue to carry our concerted effort.

Our Public Relations program must continue—continue to educate the public on the good things in medicine and its present practice—that must be conserved. But let's keep our efforts in this direction—*factual*—not fallacy. Let's have no propaganda that is camouflage —"like the bustle designed to cover stern reality."

We must progress—in our efforts, through grievance and mediation committees, to meet the demands of *fair dealing*—this will take much courage and leadership, and some vigorous policing within our own ranks. Policing of our profession is *not* a function of insurance carriers. Honesty and integrity must prevail over those tempted by new avenues of financial gain which are opened by extention of medical Insurance coverage.

Our ethics must be kept modernized.

We must continue our efforts to provide more and better doctors (and incidentally keep the public informed of those efforts). (A resolution on this will appear before this body.)

We must exert any influence we possess to solve the problem of the shortage of nurses, the length and character of their training and the resulting cost of their services to the public. The profession of nursing is passing through the same "growing pains"—that medicine faced with the standardization of Medical Schools and Hospitals. Perhaps a bit of history can help them light the way. They might review the earlier concept of a nurse and her relation to the patient and his doctor in

charting their course for the present and future in the training and supply of nurses.

And not the least of our current consideration must be our relations with other practitioners of the Healing Art.

In all of our considerations we must be mindful of the availability, quality and cost of medical care. That means a better knowledge of Blue Shield by all physicians—of Blue Cross and what makes hospitals costs rise. It means—unbiased encouragement in meeting the Rural Health Center and hospital problems. It means careful study of medical licensure. And it means more interest and activity by the doctors back home, whom you and I represent—and their knowledge and appraisal of our efforts here in behalf of our profession and the public good.

Gentlemen, you will attack many of these considerations, at this convention by resolutions and discussion. Let us have *"noisy argument"* if you will, but not *"silent grudge."* We may rush our decisions, or we may go slow—but let us not stand still.

The Vice Speaker: The Speaker's Address will be referred to the Reference Committee on Officers' Reports.

The Speaker: It is my very great pleasure to introduce to you President W. E. Barstow, M.D.

III. The President's Address

By W. E. Barstow, M.D., St. Louis

It is customary at this time to summarize briefly the work of the Michigan State Medical Society for the past year. If these remarks act to any extent as a springboard or catalyst for your consideration of current problems, they will have served their purpose.

It is impossible to single out for mention each aspect of committee activity in the time available. The handbooks in your possession contain committee reports in full to permit a later detailed study. It is desirable now merely to highlight the program now ending.

Last year's House of Delegates empowered us to purchase or construct a building to house the Societies offices. Like the usual discouraged home buyer, we have been unsuccessful, but at least we have not been rash. Suitable buildings have been located, but none at a reasonable price. Suitable land for construction is unavailable. We can only hope that conditions will change in the future.

The Public Relations activities of our Society are constantly expanding. With the assistance of Hugh Brenneman, one of our outstanding medical public relations advisors in the country today, our program has consistently led the field. The CAP program has met with sufficient success to warrant re-emphasis and even greater efforts in the future. Medication of problems arising from physician-patient relationship has already shown promise of clearing away a former source of public dissatisfaction.

The fine work of our Legislative Committee in encouraging constructive state legislation, and the efforts of the Committee on Distribution of Medical Care, have aggressively attacked other aspects of public relations. Successful public relations require an integrated and forward-looking program. We believe we are reaching every feasible area of activity.

The committee work on specific health problems has been too extensive to even outline outside of a detailed report. We now have standing committees in the field of Cancer Control, Geriatrics, Infantile Paralysis, Infectious Diarrhea, Maternal Health, Rheumatic Fever Control, Tuberculosis Control, Venereal Disease Control, Diabetes Control and others. Several of these perform an advisory function for state or national agencies. It is worth noting that the experimental work in some of these fields has developed medical control patterns attracting national attention. The Society now employs a full time co-ordinator for Rheumatic Fever Control. Pioneer work in cancer detection holds promise of vastly improved medical co-operative technique in the future, probably along the lines of the Hillsdale Plan.

Some of the hardest work of the year has developed upon the Committees for Mental Hygiene, Postgraduate Education, Preventive Medicine and Industrial Health. There has been an increasing demand for spadework in these areas. We hope that from the efforts of the Mental Hygiene group will come a working guide and outline on the subject for the use of the General Practitioner. Medical progress is rapidly approaching a stage where every scientific advance must be matched with a corresponding advance in co-operative work, and educational and distribution technique, if it is to be generally available.

Our work during the past year, for better or for worse, has been devoted toward achieving this goal.

I have purposely reserved until last a comment on the work of the Commission on the Healing Arts. This group has patiently investigated the complex and extremely controversial problems inherent in the widespread practice of Osteopathy in some areas of this state. You will soon have an opportunity to consider these problems yourself in equal detail. But I would like to refer the matter to you accompanied by three personal observations. First, as members of a public service profession, we must necessarily regard with tolerance the views of all practitioners of healing arts who reasonably attempt to employ sound scientific methods in combating human pathology. Second, any study of this problem must be regarded as merely exploratory, since final solution is probably impossible until our state possesses a single workable Medical Practice Act. And third, it is quite possible that revised and improved standards in the various osteopathic schools may soon remove most of the controversy from the issue.

The Speaker: The President's Address will be referred to the Reference Committee on Officers' Reports.

It is now my pleasure to present to you the President-Elect, C. E. Umphrey, M.D.

IV. President-elect's Address

By C. E. Umphrey, M.D., Detroit

What is going to happen in the coming year? In the absence of a seer or prophet among us I would like to propose that we pool our ideas and concentrate our efforts on those problems which seem most imminent.

We are already rapidly applying ourselves to the overall planning of civil defense. We must assemble all the scientific information available concerning atomic power, radiation, bacteriological and chemical warfare. We must know the better methods of treatment. Every Doctor must have this information. He must fit in a preconceived plan. We feel the medical profession is responsible for both lay and professional education in all matters concerning medical care. The Michigan State Medical Society has a scientific committee (Committee on Atomic and Allied Procedures) whose function it is to accumulate these scientific facts. Another committee (National Emergency Medical Service Committee) will integrate our work with all the lay units. Watch for their special releases. Also digest carefully the space devoted to this subject in the Michigan State Medical Society Journal and the Secretary's letters. Encourage all county medical societies to hold meetings on disaster planning if they have not already done so. In order that the central office may know how rapidly this project is being completed such meetings should be reported at once.

Have we gained or lost in our struggle to stem Socialism? There is evidence that we have lost. "Bit-

by-bit" legislation has continued to dismantel freedom and concentrate the individual's rights under bureaucratic power emanating from Washington. This then would continue to be our problem number one.

Is our "Good Citizen Campaign" the best approach? If Pennsylvania and Florida men of medicine could so awaken their citizens to the perils of socialism, we also should be capable of selecting honest fearless government leaders in Michigan. I believe our plan is a good one. That it has not worked to its fullest capacity is a problem that each of us must solve in our own communities. This or any other plan is not going to succeed unless our membership is willing to dedicate their greatest efforts and loyalty to a crusade. Two years ago we made the statement that social activities and even scientific work should be curtailed to a minimum until the American freedom we fought for in 1776, 1917, and 1941 has been unquestionably preserved for future generations. Certainly this project will fail if the American people have been transformed from doers to sitters with hands outstretched for security, to the great white father. Lethargy and apathy can vanish under a campaign such as ours.

I can only entreat you delegates who have designated your willingness to serve, by gathering here today, to redouble your efforts and to urge your confreres to do likewise. It has been said in the past that all projects in medicine are conceived and implemented by not over 10 per cent of the profession. Your officers have dedicated their services to the projects of your bidding. If we are to succeed, we must have your advice and immediate co-operation.

We believe we have a superabundance of talent. We shall try to distribute that talent on committee work, so that each project shall receive the consideration due it without becoming an undue hardship. It was with this in mind that the Secretary's letter carried a request to recommend committee personnel. Although this work has been nearly completed, your suggestions are still solicited.

What then should be project number two? It doesn't much matter whether it is insurance, cancer, rheumatic fever, allied professions, postgraduate clinical conference, immunization, radio, cinema, health council, public relations in general, rural medical care, veterans care, use and mis-use of atomic power, or World War III. If our American freedoms lose to the socialists, communists, do-gooders, and national planners, then apathy and lethargy will have won its full share of grief and retardation for millions of our citizens. Support of Michigan's twenty-seven medical "firsts," and completing new projects for better living is only feasible if we successfully sustain project number one.

In the past we have enjoyed working for our confreres. As we follow in the footsteps of our many eminent predecessors in Michigan, it is only human to miss their wise counsel. It is also human to be just a little envious, because we believe they were never confronted with as many grave situations. Because of the gravity of the situations and the brevity of time, the officers of the Michigan State Medical Society wish to make doubly sure that none of our membership talent is overlooked. We have reached a point where we cannot look to the officials to take on added duties. They are at a saturation point. To ask more service from one is already devoting a minimum of 30 days each year, to our cause would seem like an imposition.

Our attitude toward the medical profession is as it has always been. It is the best organization one could possibly belong to. We are, however, subject to the same complacent lack of interest in the vital events occurring today as are all other American citizens. It is our duty to create such a state of awareness, that those who vote will select men and women of integrity to represent us in all departments of government. To this end, I pledge you my best efforts. Will the other members of the medical profession join me in a pledge to preserve American principles of freedom at all costs? It is better to give our all now, than to look back as slaves and wish we had!

THE SPEAKER: This Address will be referred to the Reference Committee on Officers' Reports.

The next item of business is the annual report of The Council, to be given by O. O. Beck, M.D., Chairman.

V. Annual Reports of The Council

SUPPLEMENTAL REPORT OF THE COUNCIL

1. *Membership*—As of September 11, 1950, the membership of the Michigan State Medical Society totaled 5,029 including 367 Special Members who are relieved from paying dues and assessments.

2. *Finances*—The Constitution of the Michigan State Medical Society charges The Council with administration of the funds of the Society, and the Treasurer with the responsibility for safe keeping of the Society's invested funds.

Following the mandate of the Constitution, The Council has caused an "annual audit to be made of the funds of the Society by a certified public accountant." The complete report of Ernst and Ernst, for the year 1949, was published in the March, 1950, issue of THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY beginning at Page 358. On Page 361 of the same number of THE JOURNAL is a copy of the MSMS budgets for the year 1950. The audit of Ernst and Ernst is and always has been available for inspection by any member of the Michigan State Medical Society who may call at the Executive Offices, 2020 Olds Tower, Lansing 8.

The report of our auditor for the first eight months of this year (from January 1 to September 1, 1950) of income and expense is as follows:

Account	On Hand 1/1/50	Income to 9/1/50	Expenses to 9/1/50	Balance on Hand 9/1/50
General Fund	$ 57,803.59	$ 73,131.31	$ 52,537.72	$ 78,397.18
Annual Session	— 0 —	17,952.00	3,972.93	13,979.07
P.G. Institute (1950)	— 0 —	9,000.00	8,782.49	217.51
THE JOURNAL	— 0 —	38,469.26	30,854.56	7,614.70
Public Education—Current	35,238.62	94,898.75	40,055.92	90,081.45
Public Education—Reserve	33,254.46	— 0 —	31,755.73	1,498.73
Rheumatic Fever	28,887.97	8,051.58	13,009.98	23,939.57
TOTALS	$155,184.64	$241,512.90	$180,969.33	$215,728.21

Estimated Over-All Budget for 1951

Estimated Income		
1951 Dues (4,400 members at $37.00)		$162,800.00
Allocated $15.50 to General Fund	$ 68,200.00	
Allocated $1.50 to THE JOURNAL	6,600.00	
Allocated $20.00 to Public Education	88,000.00	
Estimated Balance 1/1/51, Public Education		55,727.00
Estimated Balance 1/1/51, General Fund		57,803.00
Advertising Sales, Reprints and Cuts		50,000.00
Annual Session 1951		20,000.00
Postgraduate Clinical Institute		9,000.00
Rheumatic Fever Program ($15,000) plus cash on hand ($17,000)		32,000.00
Interest and Miscellaneous Income		100.00 $387,430.00
Estimate Expenses:		
Administrative and General Expense		$ 36,100.00
Society Expense		17,700.00
Committee Expense (incl. Mich. Health Council)		25,000.00
Public Education Expense		140,800.00
JOURNAL Expense		52,900.00
Annual Session Expense		20,000.00
Postgraduate Clinical Institute Expense		9,000.00
Rheumatic Fever Expense		20,000.00
Contingencies and Surplus (incl. earmarked Rh. Fever Fund)		65,930.00
		$387,430.00

More detailed financial reports from January 1, 1950 to September 1, 1950, and also on the "Bond Account" as reported by the Treasurer to The Council at its meeting of July 16-18, 1950, have been presented today (in mimeographed form) to all members of the House of Delegates.

3. *Public Education Account*—A special $25.00 assessment was levied by the 1949 MSMS House of Delegates in order to secure "additional funds for various purposes in the work of the Michigan State Medical Society" (quoting the House of Delegates Resolution). The accumulated funds were used in 1950 for two purposes: (a) $5.00 per capita to bolster the General Fund of the Society which has ended the years 1948 and 1949 in the red; the present low dues of $12.00 per capita have proven totally inadequate to carry on the greatly increased work of your State Society with its accompanying expense; (b) $20.00 per capita was devoted to public relations and public education purposes, as indicated in the following accounting for the first eight months of 1950:

PUBLIC EDUCATION

Income on Hand 1/1/50:		$ 35,238.62
Assessment of Members		92,595.00
Assessment of Members—Prior Years		406.25
Income from sale of Movie (To Your Health)		1,897.50
TOTAL:		$130,137.37
Expenses:		
Clipping Service	$ 170.38	
Committee Meeting Expense	1,264.01	
Equipment and Repairs	59.99	
Postage	206.91	
Printing, Stationery & Supplies	718.63	
Office Rent and Light	572.24	
Salaries	11,786.32	
Telephone & Telegraph	1,169.20	
Travel Expense	1,310.02	
Misc. General Expense	1,557.13	
Cinema	1,149.77	
Newspaper Advertising	401.11	
Publications & Pamphlets	341.25	
Radio—"Tell Me, Doctor" programs	15,802.30	
National Meeting Expense	914.61	
Annual County Secretary's—Public Relations Conference	2,632.05	
TOTALS:	$ 40,055.92	40,055.92
Balance on Hand 9/1/50		$ 90,081.45

4. *Public Education RESERVE Account*—On January 1, 1950, the reserve for contingencies amounted to $33,254.46. This was the balance from the $100,000 placed at the disposal of the Special Committee on Education on January 1, 1949, to fight the imminent threat of political medicine—the emergency for which we had been building a reserve fund. The members of the Special Committee on Education (L. W. Hull, M.D., Chairman, O. O. Beck, M.D., L. Fernald Foster, M.D., E. A. Osius, M.D., and C. E. Umphrey, M.D.) reports the following expenditures from January 1, 1950 to September 1, 1950, in the Michigan CAP and Good Citizenship Campaign against statism and collectivism. The Committee feels that the present concentrated activity and unified force of the Michigan medical profession more than justifies the labor and expense of maintaining these two effective campaigns.

PUBLIC EDUCATION RESERVE

Income on Hand 1/1/50:		$ 33,254.46
Expenses:		
Salaries	$ 14,867.73	
Printing, Stationery & Supplies	9,029.22	
Postage	355.80	
Telephone & Telegraph	1,588.64	
Travel	3,615.75	
Office Equipment	15.45	
Publications & Pamphlets	111.63	
Meeting Expenses: Special Committee	411.27	
on Education Field Secretaries	4.00	
Other Meetings	1,168.35	
May 7, 1950 CAP Meeting	554.38	
Miscellaneous Expense	33.51	
TOTALS	$ 31,755.73	$ 31,755.73
Balance on Hand 9/1/50:		$ 1,498.73

After two years' expenditure (1949 and 1950), it is anticipated that the Public Relations RESERVE Account will be depleted, as originally planned. However, it is hoped that on December 31 of this year, a surplus of approximately $50,000 will remain in the Public Education Account despite a year of maximum activity.

5. *Estimated Public Relations Budget for 1951.* The Public Relations Committee recommends that the Public Education Account and the Public Education RESERVE Account be amalgamated for the year 1951, and presents the following estimate for its public education expenditures for the year 1951:

ESTIMATED BUDGET FOR PUBLIC EDUCATION
(Based on $20.00 per capita of the assessment or dues)

	1951 Budget
Cash on Hand	$ 55,726.90
Income from P. E. Assessment	88,000.00
Total Funds Available (P.E.)	$143,726.90
EXPENSES:	
Clipping Service	$ 300.00
Committee Meetings	2,000.00
Equipment and Repairs	300.00
Postage and Mailing	3,500.00
Printing	600.00
Stationery and Supplies	1,100.00
Office Rent and Light	900.00
Salaries	43,000.00
Telephone and Telegraph	4,400.00
Travel	7,200.00
Cinema	5,000.00
Display Advertising	500.00
Newspapers	2,500.00
Publications and Pamphlets	8,000.00
Radio "Tell Me, Doctor"	23,000.00
School—Sex Education	— 0 —
National Meeting Expense	1,500.00
Co. Secretary's and PR Conference	3,000.00
Miscellaneous General Expense	2,500.00
Special Committee on Education	500.00
Rural Health Conference	— 0 —
County Society Meetings	1,000.00
Field Secretary's Meetings	— 0 —
P.E. Sinking Fund	30,000.00
Total	$140,800.00
Estimated Balance on Hand January 1, 1952	$ 2,926.90

From the above financial data it is obvious that a continuation of maximum income to carry on the Society's work in 1951 is necessary, as the threat from socialization is still very much with us; in addition, the need for reserves in anticipation of less MSMS dues paying members during wartime is obvious.

A recommendation on this subject follows.

6. *Mediation Committee*—As part of its public relations activity, the Michigan State Medical Society has a Mediation Committee which acts as an appeal board for the prompt adjudication of breaches of medical professional relations that continually plague the best public relations efforts of medical societies.

According to reports received by the State Society Executive Office, 26 county medical societies of Michigan have appointed mediation committees, in accordance with the recommendation of The Council and the House of Delegates in September, 1949.

The Council again urges the House of Delegates to use its influence to the end that every county medical society appoints a mediation committee for the prompt settlement of "dispractices," which may not be sufficiently severe to receive the attention of the Ethics Committee but which seriously hamper the good public relations of Medicine.

A recommendation on this subject follows:

7. *Michigan Medical Service.* An up-to-date report on this Corporation, including finances and the $5,000 income limit proposal, will be presented to you at the meeting of Michigan Medical Service membership tomorrow, September 19, at 2:00 p.m. in the Grand Ballroom, Book-Cadillac Hotel. All MSMS Delegates are members of the Michigan Medical Service Corporation and are expected to attend this important Annual Meeting.

8. *The majority report and three minority reports of*

the Commission on Healing Arts. The MSMS House of Delegates, on September 20, 1949, adopted a motion that The Council be ordered to appoint a commission to study the osteopathic problem, and report back at the next annual session of the House of Delegates. The Council appointed this group, known as the "Commission on Healing Arts" which recently presented its reports to The Council. These reports are respectfully referred to the House of Delegates for consideration on this date, in executive session.

9. *County Hospital Staff Membership (Grand View Hospital at Ironwood):* The Michigan Attorney General recently rendered two opinions: (a) that osteopaths and (b) chiropractors have a legal right, under the County Hospital Act, to practice in hospitals organized under the provisions of Act 350 of the Public Acts of 1913. These opinions have been the subject of much serious discussion at recent meetings of The Council and of its Executive Committee. The consensus is (a) that the opinions are in error, (b) that some judicial determination probably is necessary to gain a definite decision, and (c) that this is more a hospital than a medical problem.

10. *Procurement and Assignment, 1950.* At the suggestion of the American Medical Association. The Council of the Michigan State Medical Society nominated G. C. Penberthy, M.D., of Detroit as Chairman of Procurement and Assignment for the State of Michigan. Two Vice Chairmen also were appointed, H. H. Stryker, M.D., of Kalamazoo and John R. Rodger, M.D., of Bellaire. The Council recommended to the AMA that the Procurement and Assignment files be made in triplicate and housed in three different areas of the State (wherein the Chairman and two Vice Chairmen of Procurement and Assignment reside) in order to prevent their loss in case of atomic or other major disaster to any one area.

The American Medical Association, on August 12, 1950, voted its definite endorsement of the principle of several bills pending in Congress in August which provided for the registration and induction into service of certain technical and specialists personnel, including doctors of medicine. This endorsement was reiterated by the MSMS Committee on Emergency Medical Service (on August 23, 1950).

The new doctor-draft law provides for the establishment of a National Advisory Committee "which shall advise the Selective Service system and co-ordinate the work of state and local volunteer advisory committees with respect to the retention***" professional personnel. The law does not require state or local committees to be established. Inasmuch as actual deferment is at the discretion of local selective service boards, local advisory committees under guidance of the National Advisory Committee may eventually become useful to the profession and the public.

11. *Atomic Energy.* The MSMS Committee on Atomic and Allied Procedures recently was created to study and report to the profession (a) on medical uses of atomic energy; (b) industrial uses and hazards of atomic energy; and (c) medical and technical defense in modern scientific warfare. This Committee, together with the MSMS Emergency Medical Service Committee (the two state society committees tied in with the present war effort) strongly recommend that county medical societies of Michigan arrange several programs which teach evacuation and disaster techniques and medical-industrial uses of atomic energy through films and with narrative presented by a member of one of these two MSMS Committees. It is to be noted that two talks on atomic energy are included in the program of the 1950 MSMS Annual Session.

A recommendation on this subject follows.

12. Two additional important subjects are still under discussion:

(a) *Admission Policy at University of Michigan Hospital* (in-patient). When this Study is completed, further information will be sent to all MSMS members through the Secretary's Letter.

(b) *Study of Medical Practice Act.* During the past year, a special MSMS Committee has been working jointly with a Committee of the State Board of Registration in Medicine on this project. The Joint Committee hopes to propose to the 1951 Michigan Legislature certain amendments to modernize the Michigan Medical Practice Act of 1899.

Recommendations

We respectfully invite to your attention the six recommendations in the original report of The Council printed in the Handbook on Pages 43-60. They read as follows:

The Council recommends:

1. That each and every member of the MSMS continue to co-operate wholeheartedly, both by individual action and financially, to aid the AMA and its National Education Campaign in a program of active and direct resistance against any attempt to throw the practice of medicine into politics. The past loyalty of Michigan's medical men toward the AMA is highly commended. Michigan stands in the forefront of those states whose voluntary help to our parent organization is near the 100 per cent mark.

2. That representatives of the MSMS be instructed to continue their yearly visit to Washington, D. C., on the occasion of Michigan Day sponsored by the U. S. Chamber of Commerce.

3. That newspaper and magazine editors and feature writers who have and are publishing splendid articles, factual news stories and strong editorials against socialism, be sent official letters of commendation.

4. That the By-Laws be changed so that the word "Consecutive" in the section on Life Membership (Chapter 5, Section 7) is deleted.

5. That the MSMS co-operate in a national conference on state and community health leadership, proposed for Detroit on October 1, 1950, under the sponsorship of the AMA and the MSMS.

The sixth recommendation originally read:

> "That the Annual Dues of the Michigan State Medical Society be increased sufficiently to provide necessary appropriations to the MSMS General Fund and for the various purposes in the work of the Michigan State Medical Society."

The Council, at its meeting of September 17, 1950, amended the recommendation to read as follows:

6. That the annual dues of the Michigan State Medical Society be set at $50.00 to provide necessary appropriations for the various purposes in the work of the Michigan State Medical Society.

The Council respectfully submits two additional recommendations:

7. That the House of Delegates as a whole and each Delegate as an individual use all efforts to the end that every county medical society in Michigan has an active Mediation Committee so that any complainant may be apprised of the fact that there is available in every county medical society a Mediation Committee to which the complainant may make reference in writing, in case of alleged "dispractice."

8. That county medical societies give priority to programs, during the ensuing months, which teach evacuation and disaster techniques and which explain the medical-industrial uses of atomic energy, in the preparation of which programs the assistance of the MSMS Emergency Medical Service Committee and the MSMS Committee on Atomic and Allied Procedures is offered.

Respectfully submitted,

O. O. Beck, M.D., *Chairman*
R. J. Hubbell, M.D., *Vice Chairman*
L. W. Hull, M.D.
P. A. Riley, M.D.,
Wilfrid Haughey, M.D.
J. D. Miller, M.D.
R. C. Pochert, M.D.
H. B. Zemmer, M.D.

L. C. Harvie, M.D.
E. A. Oakes, M.D.
F. H. Drummond, M.D.
C. A. Paukstis, M.D.
A. H. Miller, M.D.
W. S. Jones, M.D.
J. S. DeTar, M.D.
E. A. Osius, M.D.
W. B. Harm, M.D.
William Bromme, M.D.
R. H. Baker, M.D., *Speaker*
W. E. Barstow, M.D., *President*
C. E. Umphrey, *President-Elect*
L. Fernald Foster, M.D., *Secretary*
A. S. Brunk, M.D., *Treasurer*
E. F. Sladek, M.D., *Immediate Past President*

The Speaker: This report will be referred to the Reference Committee on Reports of The Council.

EXECUTIVE SESSION

E. D. Spaulding, M.D. (Wayne): I move that we go into Executive Session.

R. A. Springer, M.D. (St. Joseph): I second it.

The Speaker: Is there any comment? If not, are you ready for a vote on the motion that we go into Executive Session? All those in favor of the motion say, "aye"; opposed, "no." The motion is carried.

* * *

I now declare The House in Executive Session. I call on J. S. DeTar, M.D., at this time.

VI. Report of Commission on Healing Arts (in Executive Session)

J. S. DeTar, M.D., Milan, presented the prepared report of the Commission on Healing Arts.

The meeting was recessed at 1:00 p.m.

MONDAY AFTERNOON SESSION

September 18, 1950

The House of Delegates reconvened at 2:10 p.m.

VIII. Report of Delegates to AMA

AMA Interim Session, Washington, D. C. December 6-9, 1949

After the call to order, the first order of business was the election of the General Practitioner of the year. Dr. Andy Hall of Mount Vernon, Illinois, a graduate of Northwestern Medical School in 1890, and who had practiced in Mount Vernon, Illinois, for nearly sixty years and who had served in three wars, the Spanish-American, the Philippine insurrection in 1900, and World War I, was elected over Dr. Lyle "Bunny" Hare, Spearfish, South Dakota, and Dr. Thomas Edwin Rhine of Thornton, Arkansas.

The Address of the Speaker, and the appointment of Reference Committees, which included, Dr. Jan Paul Pratt, Section of Obstetrics and Gynecology, Grover C. Penberthy, Section on Surgery, Wyman D. Barrett and Willis H. Huron from our State Society were included. Then followed the Address of the President, Dr. Ernest E. Irons, who pointed out to us the dangers that confront the medical profession and the citizens of our country in the present trend in Government towards the Welfare State and reviewed our fight over the past year against these socialistic trends. He also called attention to the coming months of our battle and expressed confidence that we would continue to combat these trends, only if the medical profession, individually and through our various state and component county societies would continue to be enthusiastically alert.

President-elect Elmer L. Henderson was then presented to The House, and made no comment.

Report of the Officers: Dr. George F. Lull, Secretary, reported that the membership of 143,000 was the largest in the history of the American Medical Association.

Report of the Board of Trustees, by Dr. Louis Bauer, on a proposed amendment to the By-Laws: Amendment to the By-Laws, Division One, Chapter II, page 9. Tenure and Obligations of Membership. Dues.

Section 1. When the Secretary is officially informed that a member is not in good standing in his component society, he shall remove the name of said member from the membership roll. A member shall hold his membership through the constituent association in the jurisdiction of which he practices. Should he remove his to another jurisdiction, he shall apply for membership through the constituent association in the jurisdiction to which he has moved his practice. Unless he has transferred his membership within six months after such change of practice, the Secretary shall remove his name from the roster of members.

Section 2. Annual dues, not to exceed $25.00, may be prescribed for the ensuing calendar year in an amount recommended by the Board of Trustees and approved by the House of Delegates. Each active member shall pay said annual dues to his constituent association for transmittal to the Secretary of the American Medical Association.

An active member who is delinquent in the payment of such dues for one year shall forfeit his active membership if he fails to pay the delinquent dues within thirty days after notice of his delinquency has been mailed by the Secretary to his last known address.

This was the recommendation of a special committee appointed, by The House to be given to all state society secretaries to be utilized as the state societies see fit.

Also pointed out comments on Senate Bill 1453, concerning Federal Grants to Medical and other Health Professional Schools.

Criticism offered by the Council on Education and Hospitals, clearly indicates that this bill is not satisfactory and that it is potentially dangerous to the continued academic freedom of the Medical Schools and that the Board of Trustees feels that since this bill does not guarantee such freedoms and since the bill contains other undesirable features, that it must offer opposition to the enactment of this bill.

ETHICS.—The attention of The House is called to the fact that some state associations have set up special machinery for taking disciplinary action on their members for overcharging and for other violations of the Principles of Medical Ethics. The Board recommends that all of the states whose societies have not done this study the situation with a view to establishing some form of grievance committee to control such matters.

RETIREMENT OF DR. MORRIS FISHBEIN.—The Board of Trustees announces that Dr. Morris Fishbein, by mutual agreement, was retired as Editor of *The Journal of the American Medical Association* on December 1, 1949. The Board has made arrangements for adequate lifetime remuneration for Dr. Fishbein.

Dr. Fishbein has given thirty-seven years of devoted service to the American Medical Association. He has been the worthy successor to Dr. George H. Simmons, who laid the foundation for the present high standing of *The Journal of the American Medical Association*. The fact that *The Journal* is now the outstanding medical publication in the world is due to Dr. Fishbein's editorial genius which has been exerted over the past twenty-five years. The American Medical Association

and the entire medical profession owe him a debt of gratitude.

APPOINTMENT OF DR. AUSTIN E. SMITH AS EDITOR.—The Board announces that Dr. Austin E. Smith has been appointed as Editor to take the place of Dr. Fishbein.

CHANGE OF NAME OF *HYGEIA*.—The Board announces that the name of the magazine *Hygeia* has been changed to *Today's Health*. This change was made after a careful study and opinions were received from various individuals who were interested in the magazine, and it was thought to be in the best interest of all concerned to make this change.

WORLD HEALTH ORGANIZATION.—The Board also urged all members of the American Medical Association to join the World Medical Association, saying that they were anxious to have at least 5,000 members of the American Medical Association as members of the United States Committee so that the aims and ideals of the World Medical Association can readily be carried out. The United States Committee has guaranteed to underwrite the expenses of the Secretariate, certain expenses of The Council and the publication of *The Bulletin* for a number of years.

* * *

REPORT OF THE JUDICIAL COUNCIL was presented by Dr. E. R. Cuniffe, who reported on the revision of the Principles of Medical Ethics.

REPORT on THE COUNCIL of MEDICAL EDUCATION AND HOSPITALS, who set up essentials of an acceptable school of Physical Therapy and an acceptable school for Record Librarians.

REPORT of THE COUNCIL on MEDICAL SERVICE, concerning lay-sponsored voluntary health plans.

Following the conclusion of the report of the officers, resolutions were introduced on establishment of annual dues for active membership, by Dr. James C. Sargent, of Wisconsin. Since you are familiar with this, and have been informed by the Secretary of the Association, no further comment is offered.

RESOLUTION on MEDICAL and HOSPITAL CARE OF VETERANS with NON-SERVICE CONNECTED DISABILITY was offered by Dr. Robert B. Wood, of Tennessee, on behalf of the delegations from the states of Tennessee and Texas. This was the most controversial of all resolutions presented, and since Dr. Wyman D. Barrett of our delegation was a member of the Reference Committee that considered the resolution, he can give all of the facts. However, the report of the committee was rejected by the House, and the Speaker was directed to appoint a committee from the members of the House of Delegates to report next year with definite recommendation as to what The House stands for on this issue. This was carried.

RESOLUTION on FORMATION of JUNIOR AMERICAN MEDICAL ASSOCIATION, consisting of medical students and interns, to affiliate with the national organization, was passed.

RESOLUTION on COMPENSATION for TRUSTEES AND GENERAL OFFICERS was passed, with reservations.

RESOLUTION ON SPECIALTY TRAINING, setting up two or three years of general practice before specialization was undertaken, was offered by three states.

RESOLUTION on GENERAL PRACTICE SECTIONS IN HOSPITALS, asking that the House of Delegates again re-affirm its actions of December, 1946, and June, 1949, concerning general practice in hospitals, was again adopted.

Many more resolutions concerning voluntary Health Insurance Plans, were all considered and adopted. Dr. R. L. Novy attended most of these Reference Committee meetings and is better informed to report than other members of our delegation.

RESOLUTION on an appointment of a committee of non-medical men to assist in the American Medical Association campaign was unanimously adopted.

RESOLUTION on remission of dues, by Dr. John W. Cline, of California: RESOLVED, That the House of Delegates request the Board of Trustees to ask the state and county societies to remit dues payable to the American Medical Association on the same basis that they would remit dues payable to themselves.

The motion to adopt was regularly seconded and discussed, after which Dr. Cline deleted the words "state" and "after" the, and left in "county medical societies."

After further discussion, Dr. G. Henry Mundt, Illinois, made a substitute motion that the Board of Trustees study the problem on a national basis and proceed with its findings in the matter of the collection of the dues, and the substitute motion was carried. Dr. Mundt was asked to repeat his substitute motion, which was done for him by the reporter.

Dr. Howard Schriver, Ohio, moved to reconsider the vote so that the Board be informed that there shall be no exclusion from the payment of dues of any member in the active practice of medicine. Dr. E. Vincent Askey, California, stated that the original motion was still before the House as amended and that Dr. Schriver's motion was an amendment; Dr. G. Grady Dixon, North Carolina, requested another amendment, that no member be relieved from the payment of dues to the American Medical Association, regardless of state and county, without special action of the Board of Trustees, which was not seconded. Dr. Schriver was asked to restate his amendment which he did as follows:

The amendment was offered, that all members of the medical profession in active practice in the United States in order to maintain membership in the American Medical Association, and that the question of non-payment of these dues in exceptional circumstances be left to the discretion of the Board of Trustees. The amendment was seconded by Dr. G. Grady Dixon, North Carolina.

After further discussion, Dr. Cline's resolution, as amended, was adopted.

All members of the Michigan delegation attended all sessions of the House. Dr. Ralph A. Johnson, alternate delegate, was in attendance at all sessions and attended and entered into the deliberations of several of the reference committees. The members of the delegation who were not serving on reference committees attended as many of the hearings before reference committees as was possible. All of the Michigan delegation, along with several of the State Officers including the President and President-Elect, Mr. Brenneman, Dr. Candler, the Secretary of the Wayne County Medical Society, and the President of the American Academy of General Practice, met with the members of the delegations from other states for breakfast in the Michigan Room. It was here where we exchanged ideas and formulated plans for future meetings in order that we might have support in carrying out the ideas and ideals of The House of Delegates and The Council of the Michigan State Medical Society.

AMA House of Delegates, San Francisco, June, 1950

Ten thousand doctors attended the 99th Annual Meeting of the American Medical Association in San Francisco.

The House of Delegates, made up of 198 delegates, was in session from Monday through Thursday and transacted a great volume of business. On one day alone action was taken on seventy-four different items.

In spite of the multiplicity of items, there was a certain unity, for various problems by constantly recurring became preponderant and that basic policies underlying these problems varied little. Dr. Henderson of Chicago, President, keynoted the meeting in his address:

"We have accomplished a great deal but the fight is not ended and we must continue to fight for freedom of American people and freedom of medicine and the defeat of socialism."

There were two general phases in the fight for freedom of medicine: The predominant one, the fight against federal control of medicine; the other, the fight against subjugation and encroachment by groups within the medical profession, primarily the specialty boards and hospitals.

In the fight against federal control, the House of Delegates mainly reaffirmed previous action. summarized under the following headings: "The National Education Campaign," "Public Relations" and "Legislation."

National Education Campaign

Expressed its approval of the campaign as conducted during the past 18 months. In his speech Dr. Irons, retiring president, summarized some of the results. "Two years ago we were on the defensive. Citizens now understand better the threat of socialism and we are on the offensive. Much of the inertia has been overcome." He stated that 10,000 organizations already have adopted resolutions opposing compulsory health insurance. The campaign for voluntary insurance has resulted in 68 million persons obtaining hospital protection, 40 million against surgical costs and 16,000 are being added daily to voluntary health insurance plans. It was also reported that since the start of 1949 more than 77 million pamphlets, folders and leaflets have been distributed.

Approval of the renewal by the Board of Trustees of its contract with Whitaker and Baxter for another year.

Approved the projected program of Whitaker for a nationwide advertising campaign in October through newspapers, radio and magazines. The cost of this program will be approximately one million dollars.

Public Relations

The officers in their addresses to the House emphasized the importance of physicians as citizens and their responsibility to vote.

The House of Delegates recommended that the Public Relations Department of the AMA and the Washington Office be expanded.

Recommended that each County Society provide a Grievance Committee, telephone emergency service, information service and provide information as to medical care for the indigent.

Legislation

The House of Delegates opposed the following bills:

S-1453—FEDERAL AID TO MEDICAL EDUCATION and stated "We will oppose any bill for federal subsidy of medical schools until federal control of our medical schools is impossible."

S-1411—SCHOOL HEALTH SERVICE ACT.

S-522—LOCAL PUBLIC HEALTH UNITS.

For clarification it was stated that Public Health should not be for diagnosis of disease and should not undertake any treatment except for indigent, venereal disease and tuberculosis and non-indigent only if treatment is not available through private sources.

REORGANIZATION PLAN No. 27.

Requested the Legislative Committee to review the question of income tax exemption for postgraduate training with the end in view of introducing legislation if deemed advisable.

Attention was called to the Supreme Court ruling in 1942 which gives the government power to regulate that which it subsidizes. It was also emphasized that no emergency exists regarding health and medical care in this county and that any legislation to meet health needs would be premature until the present health survey has been completed and facts made available.

Hospitals and the Practice of Medicine

The fight against subjugation of medicine by groups within the profession centered on the relationship of physicians with hospitals and the specialty boards. (Action taken by the Delegates relative to specialty boards is under the heading "Medical Education.")

Action on the physicians' relationship with hospitals was centered on the Hess Report which had been discussed by the House at the two preceding sessions. At the current session resolutions in support of this report were introduced by five different states. After a long discussion an amended version of this report was passed by the House of Delegates. Some of the basic principles stated in this report are:

1. Physicians in their relationships with hospitals must be guided by the Principles of Medical Ethics of the AMA as stated in Chapter 1, Section 3; Chapter III, Article VI, Sections 2, 3, and 6.
2. In almost all instances it is illegal for a corporation to hire a professional man and then sell his services to the public on fee basis for the profit of the corporation.
3. That a physician should not dispose of his professional attainments or services to any hospital, lay body, organization, group or individual by whatever name called, or however organized, under terms or conditions which permit sale of his services by this agency for a fee.
4. Where hospitals are not selling services of a physician financial arrangements may be placed on a mutually satisfactory basis. For teaching, research, and charitable purposes corporations may provide such services and engage doctors.
5. It is the opinion of the AMA that the practice of anesthesiology, pathology, physical therapy and radiology are an integral part of the practice of medicine in the same category as surgery or internal medicine.

To carry out these principles it was recommended that:

1. Blue Shield and Blue Cross be requested to cooperate to the extent of writing all new contracts in such a manner that Blue Shield will cover insurable medical services and Blue Cross will cover insurable hospital services.
2. In the event of a controversy between physicians or between physicians and hospital management that every effort be made to settle it at the staff management level; if it cannot be solved then assistance of the County Medical Society should be requested; next the State Medical Association; finally, it can be referred to the Judicial Council of the AMA.
3. Each County Medical Society appoint a Committee on Hospital and Professional Relations.
4. If and when a physician is found to be unethical by the proper authorities and is still retained by a hospital approved for intern and resident training, the Judicial Council may request the Council on Medical Education and Hospitals to show cause why the Council should not remove such a hospital from the approved list.

Medical Education

The House of Delegates took the following action in the field of Medical Education:

(a) Residency Training:

Approved the revision of essentials for approved internships and residencies. Appointed a committee to study the problem of two-year rotating internship and the extension of the requirements for residencies in obstetrics and gynecology.

Reaffirmed the principle of uniform inspection between the specialty boards and the AMA.

For clarification stated, "It should not be essential or even desirable that all hospital residencies should adopt same program or experience but it is essential that all hospitals should meet requirements of approved hos-

pitals and obtain comprehensive results." Disapproved the practice of certain hospitals that make specialty rating a requirement for appointment and promotion. Further stated, "The particular specialty in which residents are being trained should be represented on hospital staff by well-qualified specialists whether or not they hold Specialty Boards." Urged the Council on Medical Education and Advisory Committee to Medical Specialty Boards to exercise the greatest discretion in approving new Specialty Boards.

(b) Organization for Interns and Medical Students:

Stated that the AMA cannot support the Association of Interns and Medical Students.

Approved the proposal submitted by the AMA for the establishment of a Student American Medical Association and recommended that if and when such organization is set up that it be given the active support of the medical profession.

(c) General Practice:

1. Approved the report of the Committee on General Practice which recommends a one year rotating internship followed by one year general practice residency.

That the Specialty Boards give reasonable credit for time spent in general practice.

Continuance of the integration of general practice into hospital staffs. That there be more emphasis on general practice in undergraduate years.

2. Recommended that Academy of General Practice prepare a manual on general practice departments in hospitals.

Membership

The House took the following action regarding membership:

Set the 1951 AMA dues at $25.00.

Amended the By-Laws so that as of January 1, 1951, the dues will include a subscription to *The Journal of the American Medical Association.*

Amended the By-Laws so that Associate Members shall be privileged to attend scientific meetings without the right to vote or hold office.

Urged State and County Medical Societies with restrictive rules to open their doors to Negro doctors.

The Board of Trustees report that:

Fellowship dues for 1951 will be $2.00. Each constituent society will be allowed 1 per cent on AMA dues collected.

National Emergency Service

Urged the immediate passing of adequate federal and state enabling legislation and the immediate establishment, in those states that have not done so, of a civil defense organization headed by a civilian defense director.

That the AMA continue to extend the fullest cooperation with the medical services of the Armed Forces and the National Security Resources Board with the end that the most effective utilization of medical personnel be achieved for the maximum protection of the Nation.

Urged that a Medical Advisory Committee be appointed to function at top level and that the AMA render any and all assistance to it and to the National Security Resource Board as a whole that may lie within its power.

Insurance

Recommended that the service of graduate nurses be included in the prepayment insurance plans.

Urged the evaluation of health insurance policies on a state level.

Approved Committee Reports

The Committee on Blood Banks which included:

(a) Survey of blood banks in the United States. There are in all 1,648 of which 1,571 are hospital blood banks.

(b) The recommendation that the AMA set up minimum regulations for establishment of blood banks.

(c) Emphasized the need for evaluation of nation's blood needs.

(d) Basic principles regarding replacement and interchange of blood.

The Committee on Displaced Persons which urges utilization of these persons in state hospitals and in Indian and Alaskan services. A resolution was also passed recommending that the AMA give moral support to any Medical School or hospital that provides adequate training of displaced persons.

The Committee on Chronic Illness.

Miscellaneous

Postponed action on the resolution regarding medical and hospital care for veterans for non-service connected disability.

Authorized appointment of a Continuing Committee to augment and clarify the AMA 12-point program.

Approved the principle of self testing for diabetes.

Endorsed the World Medical Organization.

Awarded the 1950 Distinguished Service Award to Ernest Graham of St. Louis.

Urged that Congress make adequate appropriation to fight tuberculosis among Indians.

Endorsed the use of all recognized diagnostic procedures for cases of cancer and recommended that in case of mass survey it should be in the hands of qualified private physicians and be conducted on a local level under the State Society.

Approved the surveys of medical care and education in England, which will be published, and urged their dissemination. In his speech, Dr. Irons pointed out that in England there is now insurance to protect against the delay of government medicine.

Election of Officers

President—E. L. Henderson, M.D., Kentucky.
President-Elect—John W. Cline, M.D., California.
Vice President—R. B. Robins, M.D., Arkansas.
Secretary—George F. Lull, M.D., Chicago.
Treasurer—J. J. Moore, M.D., Chicago
Speaker—F. F. Borzell, Philadelphia.
Vice Speaker—James R. Renling, New York.
Trustees—Leonard Larson, North Dakota; Thomas P. Murdock, Connecticut.

Coming Meetings

Interim Session:
1950—Cleveland.

Annual Session:
1951—Atlantic City.
1952—Chicago.
1953—New York City.

Respectfully submitted,
W. H. Huron, M.D.
Wyman D. Barrett, M.D.
Robert L. Novy, M.D.
William A. Hyland, M.D.
L. G. Christian, M.D.

The Speaker: The report as presented by R. L. Novy, M.D., will be referred to the Reference Committee on Officers' Reports.

IX. Report of Committee to Study Councilor Districts

B. R. Corbus, M.D., presented his prepared report.

The House of Delegates, at its last meeting, directed "that a special committee be appointed to study the possible regrouping of counties in Councilor Districts to obtain better representation of the larger societies."

You will remember that delegates from one of the larger counties, stimulated perhaps by the action of the House in adding two new Councilors to the Wayne

County district, advocated, through resolution, that every large county unit should be represented on the Council. The argument of the advocates of the resolution were to the effect that the problems of the district predominantly urban, yet which had within its boundaries counties which were largely agricultural in type, could not be adequately represented by the councilor who happened to come from the outlying district.

The opponents felt that the situation could be well handled locally since in every district wherein there was a large city, predominant control rested within that county by virtue of its larger voting membership.

Your committee felt that this was an excellent opportunity to review the entire state in reference to its Councilor Districts. These were established in 1903, as you know, to correspond with the Congressional Districts. As a first step, the Committee made a comparative study of the present Councilor Districts and the Medical Trading Areas, as developed by Doctor Dickinson of the Bureau of Economics of the AMA. A member of the committee made for us a demonstration with maps, and we find a most striking consistency between the present Councilor Districts and the Medical Trading Areas.

Let me say, as one who was long connected as an executive or official with this organization, that it has ever been the concept of the officers of this Society that there should be a close liaison between its officers and councilors and the members of the Society, to the end that each should be made to feel that he is truly a part of the organization, and should be kept closely in touch with its activities. To that end, councilors have been constantly urged to plan to meet, from time to time, with each County Society within his district, and each is required to report the status of his district at each meeting of the Council. In recent years, the Society has spent thousands of dollars in mailing to each member a Secretary's Letter and innumerable pieces of literature bearing on matters important to you and to your Society.

The phenomenal growth of the Detroit area has been recognized by subdividing the first district. A second councilor was appointed in the 30's, and this area is now represented by four councilors.

The Executive Committee has been increased by two, perhaps three, members since your chairman was first a member of that committee. The addition of the Speaker of the House of Delegates makes for a closer alliance between the committee and the delegates, and the frequent invitations that are extended to members of the Society provide for an open discussion on important matters which can be relayed to the membership.

Your committee is impressed that even at the present time the Council, as an administrative body, is somewhat unwieldly. There is so much business to be transacted in the limited time that can be given to it, that your councilors labor from early morning until late at night. If, as suggested by the resolution, each larger county have a councilor of its own, the present unwieldiness would be made worse, and your committee cannot see that there would be compensating advantage.

Your committee, therefore, recommends that no action be taken that would increase the number of Councilor Districts, nor the number of councilors. Several members of the committee felt that, from the standpoint of efficiency, action might well be taken that would decrease the number of Councilor Districts and the number of councilors.

In the study of the district areas, your committee felt that there were only two changes which might advantageously be made in the arrangement of Councilor Districts.

The first of these two changes would allocate Kalkaska County to the Ninth District from the Tenth District, and the other, to allocate Clinton County to the second District from the Sixth District. It goes without saying that these changes should not be consummated except with the consent of the County Societies concerned. We suggest that the matter be taken up with them.

Your committee feels that this is the proper time to present for your consideration certain suggestions in regard to the election of councilors. It is self-evident that if the councilor is to represent his constituents efficiently and maintain a proper liaison between them and the State Society, he should be one who is held in favor by the men of his district. It is a matter of record that on several occasions the delegates have come into the House without being aware that the term of their councilor had expired. It became necessary, in the midst of the election, for them to make what might well be called a "snap-shot" nomination. Not necessarily was the choice a poor one, but oftentimes the choice did not meet the approval of his constituents, or perhaps there was a feeling on their part that something had been put over.

Therefore, your committee recommends that the Secretary be instructed to notify, well in advance of the annual session, the presidents, the secretaries and delegates of those county societies whose councilor term will regularly expire at that session.

A somewhat similar situation arises when the vacancy in the Council occurs during the session of the House of Delegates. In that event, the committee recommends that opportunity be provided for a caucus of the delegates of the affected district before nominations are made, and suggests that changes in the By-Laws to that effect be made if that procedure is necessary.

Your committee further recommends that except in the above-mentioned situation, provision be made in the By-Laws that delegates be required to submit in writing nominations for councilor at the first meeting of the House of Delegates, and that the election be held as usual at the last meeting of the House.

Respectfully submitted,

Burton R. Corbus, M.D., *Chairman*
A. S. Brunk, M.D.
H. H. Cummings, M.D.
L. J. Hirschman, M.D.
W. H. Huron, M.D.
C. R. Keyport, M.D.
R. S. Morrish, M.D.
E. F. Sladek, M.D.
P. R. Urmston, M.D.

The Speaker: The report will be referred to the Reference Committee on Constitution and By-Laws.

X. Resolutions—Motions and Petitions

X—a. REQUEST FOR REPEAL OF P.A. No. 59 OF 1937.

L. G. Christian, M.D. (Ingham): The Ingham County Medical Society unanimously instructed their delegates to present the following resolution:

Whereas, the basic science law was enacted by the legislature in 1937 as Public Act No. 59 after many years of study by the Michigan State Medical Society; and

Whereas, the original concept was entirely worthy in principle, and it was hoped that it would raise the standard of the healing arts in the State of Michigan; and, however,

Whereas, the experience of the past 13 years has demonstrated that the original concept has not been accomplished, but rather the reverse, and in fact the citizens of Michigan have been deprived of the services of many well qualified physicians; and further,

Whereas, this has resulted from two particular effects of this law: One, it has discouraged highly trained physicians from undertaking examinations in courses of study in which they qualified years previously; and second, it has discouraged continued study and training in the institutions of this state by young men in view of lack of licensure and the necessity of additional examina-

tions in subjects in which they themselves have already qualified, and thereby imperiled the entire resident training program of the hospitals throughout the state; and

WHEREAS, there have been manifold other objections to the practical application of this law: Therefore be it

RESOLVED, That this House of Delegates goes on record as favoring repeal of the Public Act No. 59 of the regular session of the legislature of the State of Michigan, 1937; and be it

RESOLVED further, That this House instruct The Council and the officers of the Michigan State Medical Society to sponsor through its legislative committee the necessary legislation to accomplish repeal of the above-named act.

THE SPEAKER: This resolution will be referred to the Reference Committee on Legislation and Public Relations.

X—b. URGING DOCTOR OF MEDICINE TO EXERCISE RIGHT OF FRANCHISE

D. R. SMITH, M.D. (Iron Mountain):

WHEREAS the Armed Forces of the United States are once again fighting on foreign soil to preserve the rights of free people; and

WHEREAS, freedom is gained by fighting and retained by voting; and

WHEREAS, an excellent opportunity to reaffirm the faith of Americans in this hard-won freedom becomes available this November 7; Therefore be it

RESOLVED, That the Michigan State Medical Society call upon its members to exercise their right of franchise on November 7, 1950, and to persuade their families, patients and friends to do likewise.

X—c. SUPPORTING UNITED NATIONS.

D. R. SMITH, M.D.:

WHEREAS, the United Nations is conducting a war against Communism in Korea; and

WHEREAS, Socialism is the twin of Communism; and

WHEREAS, the medical profession is strongly opposed to both Socialism and Communism; and

WHEREAS, the medical profession in Michigan has been placing great emphasis upon efforts to combat these pernicious trends; Therefore be it

RESOLVED, That the Michigan State Medical Society reaffirm its determination to halt the socialization of our free economy and pledges its wholehearted support of the United Nations in resisting Communistic aggression in Korea and the full collaboration of doctors of medicine with the Armed Forces of the United States.

THE SPEAKER: These two resolutions will be referred to the Reference Committee on Resolutions.

X—d. URGING INCREASE IN NUMBER OF MEDICAL GRADUATES

P. E. SUTTON, M.D. (Oakland):

WHEREAS, the Michigan State Medical Society's House of Delegates at its 1948 session adopted a resolution "to increase the number of medical graduates," which read:

"WHEREAS, there is a general agreement as to the need for a larger number of physicians; and

"WHEREAS, the facilities for teaching are not sufficiently increased to provide hope in the near future of answering the need for a larger number of physicians; and

"WHEREAS, the number of individuals other than doctors of medicine licensed to practice the healing art in the State of Michigan has increased materially; Therefore be it

"RESOLVED, That the Michigan State Medical Society through its officers support any reasonable means to increase the number of students graduated from medical schools in this state, and that the delegates to the American Medical Association take similar action at the next meeting of the American Medical Association House of Delegates;" and

WHEREAS, the Michigan State Medical Society sponsored and urged the adoption by the 1949 Michigan legislature of a resolution seeking more financial help for the medical schools of the University of Michigan and Wayne University which resolution was instrumental in the action of the Michigan legislature in appropriating funds sufficient to develop plans for an out-patient building connected with the University of Michigan Hospital; and

WHEREAS, the Michigan State Medical Society was prime mover for the calling of the three Michigan Rural Health Conferences (1947-48-49) which stressed:

(a) More facilities to train doctors of medicine;
(b) More facilities in rural areas to attract doctors of medicine; and
(c) Setting up of a loan fund to train doctors of medicine who would agree to practice in rural areas (with the aid of the Michigan Foundation for Medical and Health Education, Inc.); and

WHEREAS, the Michigan State Medical Society, which has supported financially the Michigan Health Council from its very formation, has worked actively with the Council to achieve one of its important projects; i.e., the gaining of the people's support for increased medical education facilities, to secure more practicing doctors of medicine; and

WHEREAS, the Michigan State Medical Society worked successfully with Wayne University to secure from the 1950 Michigan legislature (first extraordinary session) a grant to develop plans for a Medical Science Building at Wayne University College of Medicine; and

WHEREAS, the Michigan State Medical Society used its influence with the 1950 Michigan legislature (first extraordinary session) to obtain a grant for a Medical Center Building for the University of Michigan Medical School, which was appropriated; and

WHEREAS, the Michigan State Medical Society has urged continuation of the present policy of admission to medical schools based solely on merit and aptitude to gain the best qualified and maximum number of doctors, regardless of ancestry, race or creed: Therefore be it

RESOLVED, That the Michigan State Medical Society continue and increase its efforts to gain further funds from the Michigan legislature and from the people of the State of Michigan, by concentrated drives and through contacts on a permanent basis for contributions, to the end that: (a) adequate facilities (school buildings) are supplied the two medical schools in Michigan; and (b) necessary additions to the faculty of these two Grade A schools of Michigan are made by routinely training a requisite per cent of each medical school class to become teachers; and be it

RESOLVED further, That the Michigan State Medical Society offer its co-operation to the presidents and medical deans of the University of Michigan and Wayne University for the development of an aggressive and early campaign to secure from the State of Michigan and from alumni and other citizens who are interested in better health, funds necessary to enlarge medical facilities and faculties in this state to the end that the resulting increase in the number of medical graduates from the University of Michigan and Wayne University is sufficient to continue to give adequate and good quality medical care to the people of this state.

THE SPEAKER: This will be referred to the Reference Committee on Legislation and Public Relations.

X—e. SUPPLEMENTARY X-RAY AND ELECTROCARDIOGRAPHIC SERVICE CERTIFICATE OF MICHIGAN MEDICAL SERVICE

F. D. JOHNSON, M.D. (Genesee): I have been instructed by members of the Genesee Medical Society to present the following resolution:

This resolution was presented but subsequently withdrawn and redrafted (see Page 47).

THE SPEAKER: This will be referred to the Reference Committee on Resolutions.

X—f. ENCOURAGING ADDITIONAL FUNDS FOR WAYNE COUNTY COLLEGE OF MEDICINE

W. W. Babcock, M.D. (Wayne): This has been requested to be presented by the Wayne delegation:

Whereas, the present world situation appears to demand a lasting increase in the Armed Forces of the United States and consequently an increased need for medical personnel for an unpredictable length of time; and

Whereas, there already exists some shortage of physicians, not only for the Armed Forces but also for civilian needs; and

Whereas, attempts to increase the educational facilities of Wayne University Medical School have fallen far short of the reasonable goals in spite of the fact that there is a wealth of unused clinical material in Wayne County; and

Whereas, funds for the maintenance of such medical educational facilities as are already provided are barely adequate to furnish a minimum of teaching and research personnel: Therefore be it

Resolved, That The Council of the Michigan State Medical Society direct suitable efforts toward securing further funds from the State of Michigan for the maintenance of the Wayne University Medical School, the second and only other medical school in the state.

The Speaker: This will be referred to the Reference Committee on Legislation and Public Relations.

XI. Amendments to Constitution and By-laws

XI—a. BY-LAWS CH. 5—SEC. 9—RE QUALIFICATIONS FOR SPECIAL MEMBERSHIPS

R. W. Teed, M.D. (Washtenaw): The Executive Council of the Washtenaw County Medical Society has instructed its delegation to present the following resolution regarding the By-laws:

Whereas, the By-laws relating to election of members of the Michigan State Medical Society to Retired, Emeritus and Life Membership are indefinite on a certain point; and

Whereas, a member qualifying for Retired, Emeritus or Life Membership during the interval between the fall meeting of the House of Delegates and the beginning of the following fiscal year would be required to pay dues the following year in order to maintain active membership; and

Whereas, such provision has already worked a hardship in the Washtenaw County Medical Society: Therefore be it

Resolved, That Chapter 5, Section 9 of the By-laws of the Michigan State Medical Society be amended as follows: After the words: "Annual Session of the House of Delegates," the following sentence be inserted: "Such certification shall be valid for a period of 12 calendar months, during which time the applicant shall not be required to pay dues."

The Speaker: That will be referred to the Reference Committee on Constitution and By-laws.

X—g. STUDY OF NURSING NEEDS

E. C. Long, M.D. (Wayne):

Whereas, little effort has been made to determine what type of nursing services the public needs; and

Whereas, nursing training programs have developed which do not fill these needs: Therefore be it

Resolved, That an effort be made to ascertain what are the public needs in regard to nursing services and to develop a program that would provide such services.

The Speaker: I will refer this to the Reference Committee on Resolutions.

X—h. RECOMMENDING CHANGE IN CORONER SYSTEM

D. G. Pike, M.D. (Grand Traverse-Leelanau-Benzie):

Whereas, the present duties of the county coroners make essential that the coroner be an individual with medical knowledge; and

Whereas, under the present system any individual may run for coroner by petition to the county clerk's office; and

Whereas, the present coroner system is a carry-over of old English law and is outdated and outmoded; and

Whereas, many states in our Union of the United States have abolished the coroner system in favor of a properly appointed county medical examiner system: Therefore be it

Resolved, That the Michigan State Medical Society initiate action in attempting to legislate a change in our present coroner system and the adoption of a system of appointed medical examiners who are qualified doctors of medicine.

The Speaker: That will be referred to the Reference Committee on Legislation and Public Relations.

X—i. URGING DEVELOPMENT OF A SIMPLIFIED INSURANCE REPORTING FORM

D. G. Pike, M.D. (Grand Traverse-Leelanau-Benzie):

Whereas, the completion of blanks for health, accident and hospital insurance is becoming so prominent a part of the daily duties of physicians; and

Whereas, the insurance company depends entirely upon the written report of the attending physician for the basis of evaluating and settling claims; and

Whereas, in some instances these report forms are long, involved, repetitious and confusing, requiring considerable time in checking records and in filling out these forms: Therefore be it

Resolved, That the Grand Traverse-Leelanau-Benzie County Medical Society request the Michigan State Medical Society to develop a simplified reporting form which could be used by all insurance companies doing business in Michigan; and be it

Resolved further, That in those instances in which an insurance company insists on a special long, complicated form our membership shall be privileged to make a reasonable charge direct to the company for the completion of such forms.

The Speaker: I will refer this to the Reference Committee on Resolutions.

X—j. REIMBURSEMENT OF ATTENDING PHYSICIANS BY MICHIGAN MEDICAL SERVICE

R. F. Fenton, M.D. (Wayne): This resolution is at the request of the Board of Directors of the Wayne County Academy of General Practice.

WHEREAS, Michigan Medical Service does not pay for both medical and surgical care on its medical surgical contract paying only the consultant and

WHEREAS, It is unethical for the consultant to split fees and

WHEREAS, Surgical fees have been intermittently increased during the past nine years with no attempt being made to pay the attending physician, Therefore, be it

RESOLVED, That the House of Delegates of the Michigan State Medical Society request from the Michigan Medical Service that there be no additional increase of surgical fees in any contract until some method has been devised for reimbursing the attending physician in hospitalized cases referred to consultants.

The Speaker: This will be referred to the Reference Committee on Medical Service and Pre-payment Insurance.

XI—b. BY-LAWS CH. 5—SEC. 7—RE QUALIFICATIONS OF LIFE MEMBERS

E. D. Spalding, M.D. (Wayne):

Whereas, the present By-laws in Chapter 5, Section 7, concerning Life Membership, state: "A doctor of medicine who has attained the age of 70 years and maintained an active membership in good standing for 25 consecutive years in the State Society may upon his application and recommendation of his component county society, be transferred to the Life Members' roster"; and

Whereas, a number of Michigan doctors of medicine who have attained the age of 70 years, have maintained active membership in good standing in the Michigan State Medical Society for 25 years and longer, but due to a break in the record this membership has not been 25 "consecutive years"; and

Whereas, the present use of the word "consecutive" in Chapter 5, Section 7 constitutes a hardship on these men who otherwise have attained qualifications for Life Membership in the Michigan State Medical Society: Therefore be it

Resolved, That Chapter 5, Section 7, Life Member, be amended by deletion of the word "consecutive," so that the section will read as follows:

"Section 7—Life Member: A doctor of medicine who has attained the age of 70 years and maintained an active membership in good standing for 25 years in the State Society may, upon his application, and recommendation of his component county society, be transferred to the Life Members' roster."

The Speaker: This will be referred to the Reference Committee on Constitution and By-laws.

XII. Reports of Standing Committees

L. A. Drolett, M.D. (Ingham): While I am talking, there will be distributed to you a pamphlet which I want you to read carefully.

XII—a. SUPPLEMENTARY REPORT OF THE LEGISLATIVE COMMITTEE

We of the medical profession, both in Michigan and in the entire country, have openly declared War on Socialism, the twin brother of Communism. Aroused by the threat of Socialized Medicine and its attendant dangers, we have come to the realization that those who would socialize America are intent upon doing it step by step, piece by piece, conquering by dividing the forces that oppose them. We must conclude that the only answer is a united front by all forces opposing socialization . . . the aligning together of all American groups who believe in the American way of life in a concerted effort to stop the creeping tide and to regain the ground already lost.

We are taking such a course in Michigan. Thirty-two statewide organizations have joined with us in the "Good Citizenship" campaign. The Michigan State Medical Society was responsible for the resultant movement which ended in the greatest influx of voters to the polls in the September 12th Primary Election that has ever been known in an off year election in Michigan. As the leader the medical profession did itself proud by gaining a registration of over 97 per cent of the members of the MSMS and their wives, and over 90 per cent of their assistants.

But let us not fool ourselves that we were *entirely* responsible for the record turnout of voters. In Detroit and certain other metropolitan areas the labor vote was phenomenal. There *is no* reason to decry this. There *is* reason to recognize that we have more than matched that vote and that we *must not fail* to better our record in the November 7 General Elections.

On the week of October 8 a gigantic advertising campaign will flame throughout the nation. The American Medical Association is spending a million and one quarter dollars of our money to call to the attention of the American People that the "Voluntary Way is the American Way." They are being joined by hundreds and thousands of other organizations and businesses who believe that slogan to be true.

Let me quote from a clipping recently distributed by the AMA of a newspaper release appearing in the *Chicago Daily Tribune* (read clipping as marked). It is obvious from the propaganda being issued that Mr. Stellato has *not* succeeded.

We cannot stop the scurrilous and contemptible tactics of our opponents. But we can beat them in getting out the vote. We can elect to office men who will not be swayed by their demands. We have already had public repudiation of compulsory Health Insurance and Socialized Medicine by men whose political party is committed by President Truman to its enactment.

You have nominated such men in the primaries. I invite to your attention the fact that they have *not yet* been elected. In the next legislature and next Congress, we shall need more than ever before the highest caliber of men.

We have committed ourselves. We must win in November, or we shall have more than lost face, we shall have lost our country.

Let us take off our rubber gloves and start swinging.

The Speaker: The supplemental report, in addition to the regular report of the Legislative Committee, will be referred to the Reference Committee on Standing Committees.

The Vice Speaker: Reports of Standing Committees.

XII—b. COMMITTEE ON POSTGRADUATE MEDICAL EDUCATION

Page 61 of the handbook.

XII—c. THE PREVENTIVE MEDICINE COMMITTEE

XII—d. RHEUMATIC FEVER CONTROL COMMITTEE

Page 68 of the Handbook.

XII—e. CANCER CONTROL COMMITTEE

Page 71 in the Handbook.

XII—f. MATERNAL HEALTH COMMITTEE

Page 75 in the Handbook.

XII—g. VENEREAL DISEASE CONTROL COMMITTEE

Page 76 in the Handbook.

XII—h. TUBERCULOSIS CONTROL COMMITTEE

No printed report.

XII—i. INDUSTRIAL HEALTH COMMITTEE

Page 78 in the Handbook.

XII—j. MENTAL HYGIENE COMMITTEE

Page 80 in the Handbook.

XII—k. CHILD WELFARE COMMITTEE AND SUB-COMMITTEE ON HEARING DEFECTS

Page 81 in the Handbook.

XII—l. IODIZED SALT COMMITTEE

Page 83 in the Handbook.

XII—m. GERIATRICS COMMITTEE; SUB-COMMITTEE ON DIABETES CONTROL, AND SUB-COMMITTEE TO STUDY PROBLEMS OF CARING FOR AGED

Page 83 in the Handbook.

XII—n. COMMITTEE ON INFECTIOUS DIARRHEA

XII—o. COMMITTEE ON DISTRIBUTION OF MEDICAL CARE

Page 84 in the handbook.

XII—p. COMMITTEE ON PUBLIC RELATIONS AND THE SUB-COMMITTEES

Printed in the Handbook.

XII—q. COMMITTEE ON ETHICS

XII—r. THE LEGISLATIVE COMMITTEE

All of the reports of the Standing Committees will be referred to the Reference Committee on Standing Committees.

XIII. Reports of Special Committees

XIII—a. THE BEAUMONT MEMORIAL COMMITTEE

XIII—b. SCIENTIFIC RADIO COMMITTEE

XIII—c. ADVISORY COMMITTEE TO WOMAN'S AUXILIARY

XIII—d. LIAISON COMMITTEE WITH STATE MEDICAL ASSISTANTS SOCIETY

XIII—e. ADVISORY COMMITTEE TO NATIONAL FOUNDATION FOR INFANTILE PARALYSIS

XIII—f. COMMITTEE ON INCREASE OF MEDICAL STUDENTS GRADUATED FROM MICHIGAN MEDICAL SCHOOLS

E. F. Sladek, M.D. (Grand Traverse-Leelanau-Benzie): This report, as printed in the handbook, was formulated in May, I believe. The legislature was still in session and we expected that there would be a grant to the University of Michigan for an out-patient department, so as to enable an increase in the number of medical students to the figure of 200, which is in this report. Unfortunately, the legislature did not see fit to grant funds, and so as of fifteen minutes ago the number of students entering the University of Michigan is 160. Last year's class was 150. They have crowded in an additional ten students. The number that have entered the freshman class at Wayne as of fifteen minutes ago is 68.

We are hoping that expanded facilities through legislative support will materially increase the number of admissions to these two medical schools.

The Vice Speaker: The supplemental report of the Committee on Increase of Medical Students Graduated from Michigan Medical Schools, together with their regular report and the reports of all the Special Committees will be referred to the Reference Committee on the Reports of Special Committees.

The session adjourned at 3:30 p.m.

MONDAY EVENING SESSION
September 18, 1950

The House of Delegates reconvened at 8:25 p.m.

The Speaker: We have allotted a little time to Dr. Earl I. Carr of Lansing, who would like to talk to us on some recent activity by the Michigan Foundation for Medical and Health Education, Inc. Dr. Carr has a message for us on some new developments within the organization and some plans that, inasmuch as we are a part of and have been a contributor in getting the thing going, we should be acquainted with.

Dr. Carr presented a prepared report.

X—e. SUPPLEMENTARY X-RAY AND ELECTROCARDIOGRAPHIC SERVICE CERTIFICATE OF MMS

C. K. Stroup, M.D. (Genesee): This morning Genesee introduced a resolution which the Resolutions Committee requested to be reworded and resubmitted. I therefore present this reworded resolution:

Whereas, Michigan Medical Service now issues a supplementary x-ray and electrocardiographic service certificate only to holders of a Michigan Hospital Certificate which, through a series of bookkeeping steps, in effect places the Michigan Hospital Service in the position of insuring a service which the American Medical Association has just reaffirmed is a medical service; and

Whereas, the AMA has specifically stated that hospital service contracts should cover only hospital services as published in the JAMA, July 22, 1950, page 1091: Therefore be it

Resolved, That the Michigan State Medical Society instruct its delegates who are members of Michigan Medical Service to take necessary steps to have Michigan Medical Service desist as a party to a practice contrary to the policy of the American Medical Association.

The Speaker: You understand this is a substitution for the resolution presented this morning, and is to be referred to the Reference Committee on Resolutions.

X—k. CREATING SECTION ON GASTROENTEROLOGY AND PROCTOLOGY

E. F. Sladek, M.D. (Grand Traverse-Leelanau-Benzie):

Whereas, there is an ever-increasing interest in diseases of the anus, rectum and colon; and

Whereas, there are more doctors of medicine devoting their efforts in all or part to these conditions; and

Whereas, a section in the Scientific Assembly of the Michigan State Medical Society on the subject of rectal and colon diseases could contribute greatly to the scientific program of the State Society and its Postgraduate Institute; and

Whereas, there is now a Michigan Proctologic Society: Therefore be it

Resolved, That the House of Delegates of the Michigan State Medical Society approve the development of a Section on Proctology.

The Speaker: This will be referred to the Reference Committee on Constitution and By-laws.

XIV—Reports of Reference Committees

XIV—a. REFERENCE COMMITTEE ON OFFICERS' REPORTS

(1) Speaker's Address
(2) President's Address
(3) President-Elect's Address
(4) AMA Delegate's Report

C. W. Oakes, M.D., presented the report.

Your Reference Committee on Officers' Reports considered the Speaker's Address, the President's Address, the President-Elect's Address and the report of the Delegates to the AMA.

1. *Speaker's Address*

We wish to compliment Doctor Baker on his excellent address. It was most scholarly and well given.

2. *President's Address*

President Barstow summarized the year's work with

special emphasis on the improvement of public relations. We wish to thank Dr. Barstow for this fine address.

3. *President-elect's Address*

President-elect Umphrey's address is a look into the year ahead. He stressed our problems and presented them to us in a most excellent manner.

4. *The report of the Delegates to the AMA*

The report of the Delegates to the AMA was given by Doctor Novy in place of Doctor Barrett, who is ill.

The report consisted of two parts.

(a) The interim meeting in Washington, D. C.

(b) The regular meeting in San Francisco.

We wish to thank the delegates for their hard work.

C. W. Oakes, M.D. (Huron): I move the adoption of this report as a whole.

W. W. Babcock, M.D. (Wayne): I second the motion.

Motion carried.

XIV—b. REFERENCE COMMITTEE ON REPORTS OF THE COUNCIL

C. K. Hasley, M.D. (Wayne): The Reference Committee has very carefully studied the reports of The Council as contained in the handbook for delegates and the supplemental report as given by the Council Chairman, O. O. Beck, M.D.

The committee notes with interest the amount of time that members of The Council and its Executive Committee have devoted in the interests of the Michigan State Medical Society. Their efforts are greatly appreciated by this committee.

The committee approves the financial report as presented.

The committee approves the various activities of The Council as reported in the Handbook.

The innovation in The Journal was noted and felt that it should be continued so that the latest information on Michigan Medical Service and Michigan Hospital Service is available to all members of the MSMS.

The recommendations of The Council were carefully considered. There is a little overlapping in the reports in the handbook and the supplementary report. We will take them up as they are in the supplementary report. There are a few additions.

Recommendation of The Council, No. 1. I move the adoption of this recommendation:

1. That each and every member of the MSMS continue to co-operate wholeheartedly, both by individual action and financially, to aid the AMA and its National Education Campaign in a program of active and direct resistance against any attempt to throw the practice of medicine into politics. The past loyalty of Michigan's medical men toward the AMA is highly commended. Michigan stands in the forefront of those states whose voluntary help to our parent organization is near the 100 per cent mark.

If I may, I would like to include in my motion three or four other recommendations. Unless there is objection, I will present them as a whole.

2. That representatives of the MSMS be instructed to continue their yearly visit to Washington, D. C., on the occasion of Michigan Day sponsored by the United States Chamber of Commerce.

3. That newspaper and magazine editors and features writers who have and are publishing splendid articles, factual news stories and strong editorials against socialism be sent official letters of commendation. That pertains particularly to members of the Society; not The Council itself, but individual letters.

4. That the By-laws be changed so that the word "consecutive" in the section on Life Membership (Chapter 5, Section 7) is deleted.

It is my understanding that a resolution has been introduced to that effect.

I move the adoption of this part of the report.

G. C. Stucky, M.D. (Eaton): I second the motion.

Motion carried.

C. K. Hasley, M.D. (Wayne): Recommendation No. 6 is the one that has to do with the change in dues, the recommendation that the yearly dues should be $50. The committee felt that a word of explanation should be given on how this amount was derived. The dues have been $12 a year, and it was felt this amount was inadequate. It was necessary by a special vote of the House of Delegates to use $5 given to the Educational Fund to make up the deficit. It is the opinion of the members of The Council that this is an inadequate amount to run on, and that at least $20 would be needed to carry on the activities of the Society.

In addition to that, in the past years we have had our $25 special assessment for the Educational Fund. However, it was felt that if this were all lumped into one sum and called dues for the Society that it would from a legal standpoint be much better. Also, the amount would be deductible for income tax purposes.

Consequently, we have felt that perhaps $50 was a little bit more than was necessary. In talking with some of the members we found they felt if the amount of $45 was set and this should be set as the dues for the coming year, that probably it would meet the favor of most of the members of the Michigan State Medical Society.

Therefore, I move, Mr. Speaker, that the dues for next year be set at $45 for the year.

C. K. Stroup, M.D. (Genesee): I second it.

The Speaker: Is there any discussion?

H. M. Riecker, M.D. (Washtenaw): What would be the dues of the associate members?

C. K. Hasley, M.D. (Wayne): There would be no change in the relationship of associate members. This is just the active members.

E. H. Fenton, M.D. (Wayne): It seems to me that the raise in dues should not include the first five years in practice. It seems quite a bit for some of the men who are just getting started. If we could put a rider on that and eliminate the raise for the first five years in practice, keeping the dues the same as they are at the present time, and then increase the dues after the first five years, it would be perfectly acceptable. However, I think it is wrong to place dues that high on a man just getting started in practice.

The Speaker: Are there any other suggestions?

D. H. Kaump, M.D. (Wayne): It seems to me peculiar, Mr. Speaker, that the total sum of dues should be raised from $37 to $50 in one year. In other words, a 35 per cent increase in dues in one year is quite a bit. If we were able to get along on $37 before, why would not some smaller raise, such as $8 or $10 be adequate? If we can get along on less why not make the dues less, rather than raise them to an exorbitant amount?

C. K. Hasley, M.D. (Wayne): If I may attempt to answer that question, it has been explained that the program that is contemplated is rather large and the amount of money that is going to be necessary to carry on is larger; in the event that there is a nest egg, that can be used for the idea about establishing a permanent home for the Michigan State Medical Society, an office building, or something like that. There will be plenty of places where money can be used later. We need that sum for emergency purposes. The $45 would give just a little above the red line, so to speak.

D. H. Kaump, M.D. (Wayne): But to increase the dues a third at one time seems like a big step.

C. K. Hasley, M.D. (Wayne): It has been necessary to take some of the money from funds allocated for other purposes in order to carry on the business functions of the Society.

C. R. Gatley, M.D. (Oakland): I think there is some ground for this statement about the men first starting out being allowed a lower rate. Some of the men just starting out have families and small children.

Part of the reason for saying that is the necessity for their having membership in the county society. Recently, we had a man starting up in our town, after a one-year internship, with a wife and family. He was refused for a considerable time being able to bring cases under his own name until he joined the county society, and the like. I think the first year some consideration should be given to those men. They perhaps need that money more than we do.

J. H. SCHLEMER, M.D. (Wayne): Just what brake do we have upon the expenditures of the Public Relations Committee? It seems to me that we should have some ceiling on it. Otherwise, they could expand indefinitely, and next year we might have another increase in dues.

C. K. HASLEY, M.D. (Wayne): The idea of setting this at $45 was that there would be no need for special assessments. Of course, another thing we have not taken into consideration yet is that some of the members are being called to military service and there will be a loss of revenue from that standpoint.

The committee would be very happy if someone wanted to offer an amendment to this motion for a year or two. We can incorporate it with the motion at this time.

E. H. FENTON, M.D. (Wayne): I would like to make an amendment to the motion, that dues remain the same for the first five years in active practice, and beyond that that the increase as suggested be granted.

THE SPEAKER: Is there a second to the amendment?

F. A. WEISER, M.D. (Wayne): I second it.

G. E. TOSHACH, M.D. (Saginaw): I think if we make that for five years we are going to hamstring our Public Relations Committee. I certainly have a very kindly feeling toward the men starting in practice, but it seems to me that one year is sufficient. After that most men are making a living, and while it is a great strain to carry the burden at that time the work that is going to be done by the Public Relations Committee is going to do those men a lot more good than the men of my age, so they have more at stake. They ought to be willing to pay it at least after the first year. I would like to make an amendment to the amendment that this be for one year.

R. A. SPRINGER, M.D. (St. Joseph): I second it.

THE SPEAKER: There is an amendment to the amendment that the exemption of the increased dues be restricted to one year instead of five. Is there discussion on that?

H. W. WILEY, M.D. (Ingham): I raise for a point of clarification the question of what they refer to as dues. Our dues have been $12, with the special assessment of $25, which makes an aggregate of $37. In the amendment do you refer to the dues as $12 or the aggregate of $37?

THE SPEAKER: I wish the maker of the amendment would clarify exactly what he means, in view of Dr. Wiley's remarks. Just what do you consider the basic dues at the moment?

E. H. FENTON, M.D. (Wayne): I was not considering the assessment as dues. The $25 assessment has never been considered as dues. The dues are $12.

THE SPEAKER: Then you would relieve these young members not only of any increase, but also of the assessment, or would you continue the assessment?

E. H. FENTON, M.D. (Wayne): That is right.

THE SPEAKER: The ruling has been that the assessment is part of the dues, so you would have to stay back at the present level for the one-year men. Is there any other discussion? Are you ready for a vote?

C. I. OWEN, M.D. (Wayne): I move that this be referred back to the committee for further elucidation and proper clarification, and returned tomorrow morning.

H. H. RIECKER, M.D. (Washtenaw): I second the motion.

Motion carried.

C. K. HASLEY, M.D. (Wayne): This pertains to just the one recommendation, No. 7, of The Council.

7. That the House of Delegates as a whole and each delegate as an individual use all efforts to the end that every county medical society in Michigan has an active Mediation Committee so that any complainant may be apprised of the fact that there is available in every county medical society a Mediation Committee to which the complainant may make reference in writing in case of alleged "dispractice."

The Reference Committee approves this recommendation and it is hoped that more of the component medical societies will appoint Mediation Committees. I move the adoption of this recommendation.

J. H. SCHLEMER, M.D. (Wayne): I second it.

Motion carried.

C. K. HASLEY, M.D. (Wayne): Recommendation No. 8:

8. That county medical societies give priority to programs, during the ensuing months, which teach evacuation and disaster techniques and which explain the medical-industrial uses of atomic energy, in the preparation of which programs the assistance of the MSMS Emergency Medical Service Committee and the MSMS Committee on Atomic and Allied Procedures is offered.

The Reference Committee most heartily endorses this recommendation and stresses the importance of each county medical society availing itself of these programs. I move the adoption of this part of the report.

THE SPEAKER: Is there a second to the motion?

(The motion was severally seconded.)

Motion carried.

C. K. HASLEY, M.D. (Wayne): I move the adoption of the report as a whole, with the exception of Recommendation No. 6.

M. A. DARLING, M.D. (Wayne): I second it.

Motion carried.

XIV—c. REFERENCE COMMITTEE ON STANDING COMMITTEES

P. E. SUTTON, M.D. (Oakland): We appreciate that the reports of the Standing Committees represent a tremendous volume of work, a tremendous amount of energy by a great number of individuals, and it goes without saying that we recognize and appreciate the work that is done by these committees.

As far as we could see from reading the reports and our knowledge of the work done by these committees, we could find no controversial reports, with one or two exceptions. Therefore, the main body of our report is very brief. I hope, however, that you will all take the time to read for yourselves the reports of these committees in the Handbook, pages 61 to 99.

The Reference Committee on Reports of Standing Committees recommends the acceptance of the Annual Report of the Committee on Postgraduate Medical Education. The Reference Committee also recommends the acceptance of the supplemental report.

I move the acceptance of this recommendation.

B. M. HARRIS, M.D. (Washtenaw): I second it.

Motion carried.

P. E. SUTTON, M.D. (Oakland): I might give you a brief clarification of this. There are six committee recommendations, six committee reports. The subcommittees within these six come to a total of twenty subcommittees.

The next item is the report of the Preventive Medicine Committee and all of its subcommittees. The Reference Committee recommends the acceptance of the annual report of the Committee on Preventive Medicine and its subcommittees.

I move the adoption of this recommendation.

B. M. HARRIS, M.D. (Washtenaw): I second it.

Motion carried.

P. E. SUTTON, M.D. (Oakland): The third report has to do with the Public Relations Committee. The

Reference Committee recommends the acceptance of the annual report of the Public Relations Committee and its subcommittees.

I move the adoption of the report.

R. W. Teed, M.D. (Washtenaw): I second it.

Motion carried.

P. E. Sutton, M.D. (Oakland): The fourth has to do with the annual report of the Committee on Distribution of Medical Care. The report states that there were no problems referred to the Committee on Distribution of Medical Care. Therefore, the Reference Committee recommends the acceptance of the report.

J. H. Schlemer, M.D. (Wayne): I second it.

Motion carried.

P. E. Sutton, M.D. (Oakland): The fifth item is the annual report of the Ethics Committee. The Ethics Committee reports that there have been no problems referred to its committee. We recommend the acceptance of the report, and I move the adoption of the report.

R. E. Dustin, M.D. (Lenawee): I second it.

Motion carried.

P. E. Sutton, M.D. (Oakland): The sixth and final item is the annual report of the Legislative Committee and the supplementary report which was given to us this morning at the meeting. The Reference Committee recommends the acceptance of the annual report and recommends the deletion of the supplementary report you heard read this morning.

In support of our recommendation, you remember seeing this Exhibit A this morning. There are two pages of typed report and the supplementary report. We recommend the deletion of the supplementary report, and the acceptance of the printed annual report of the Legislative Committee.

I move the adoption of the annual report.

The Speaker: I understand the committee moves the adoption of the Legislative Committee report, as printed, and the deletion of the supplementary report.

B. M. Harris, M.D. (Washtenaw): I second it.

Motion carried.

P. E. Sutton, M.D. (Oakland): I move the adoption of the report as a whole, Mr. Speaker.

R. W. Teed, M.D. (Washtenaw): I second it.

Motion carried.

The Speaker: Now, Dr. Harris, would you like to give the other half of the committee report, the Reference Committee on Special Committee reports?

B. M. Harris, M.D. (Washtenaw): I think Dr. Sutton has already explained the membership of the committee.

XIV—d. REFERENCE COMMITTEE ON REPORTS OF SPECIAL COMMITTEES

We recommend the acceptance of the Annual Report of the Beaumont Memorial Committee, with an expression of sympathy to the committee on their inability to accomplish their mission, and urge the continuation of efforts to the same end.

I move the acceptance of that.

P. E. Sutton, M.D. (Oakland): I second it.

Motion carried.

B. M. Harris, M.D. (Washtenaw): The Reference Committee recommends approval of the annual report of the Scientific-Radio Committee, as printed on pages 100 and 101 of the Handbook.

I move the acceptance of this report.

P. E. Sutton, M.D. (Oakland): I second it.

Motion carried.

B. M. Harris, M.D. (Washtenaw): The Reference Committee recommends approval of the annual report of the Advisory Committee to the Woman's Auxiliary, as printed on page 101 of the Handbook.

I move the acceptance of this report.

C. K. Stroup, M.D. (Genesee): I second it.

Motion carried.

B. M. Harris, M.D. (Washtenaw): The Reference Committee recommends the approval of the annual report of the Liaison Committee of the Michigan State Medical Society Assistants' Society, page 110 of the Handbook.

I move the acceptance of that report.

J. H. Schlemer, M.D. (Wayne): I second it.

Motion carried.

B. M. Harris, M.D. (Washtenaw): The Reference Committee recommends the approval of the annual report of the MSMS Advisory Committee to the National Foundation for Infantile Paralysis. I move the acceptance of that report.

C. I. Owen, M.D. (Wayne): I second it.

Motion carried.

B. M. Harris, M.D. (Washtenaw): The Reference Committee recommends the approval of the annual report of the Committee on Increase of Medical Students Graduated from Michigan Medical Schools.

I move the acceptance of that report.

D. B. Wiley, M.D. (Macomb): I second it.

Motion carried.

B. M. Harris, M.D (Washtenaw): I move the acceptance of the report of the Reference Committee on reports of Special Committees as a whole.

C. K. Stroup, M.D. (Genesee): I second it.

Motion carried.

XIV—e. REFERENCE COMMITTEE ON CONSTITUTION AND BY-LAWS

1. Report of Committee to Study Councilor Districts

C. I. Owen, M.D. (Wayne): We were given three resolutions for study. The first was a report of the special committee to study Councilor Districts. In substance the report concerns a revision of the Councilor Districts. It was the general concensus of the subcommittee that there be no major revision of Councilor Districts at this time. In this the committee agrees, and recommends that there be no major revision at this time.

The special committee recommended two changes in counties: The change of Kalkaska County to District 9 from District 10, and they recommend the change of Clinton County to District 2 from District 6. They also recommended that the counties concerned be given an opportunity to make their opinions known.

As our final report on their report, the committee unanimously endorses the report of the special committee to study Councilor Districts, including the recommendation that no major reallocations of the Councilor Districts be made at this time.

In accordance with the recommendation of the committee it is recommended that each county society in Councilor Districts Nos. 9 and 10 be requested for an opinion concerning the removal of Kalkaska County to Councilor District 9 from Councilor District 10, and that the county submit their opinion to the Council of the Michigan State Medical Society by June 1, 1951. That would give opportunity for action next year.

The same recommendation is made in regard to the change of Clinton County from District 2 to District 6; that all county societies in those districts be notified so they can make a study and submit their opinion by June 1, 1951.

I move that this be adopted.

G. C. Stucky, M.D. (Eaton): I second it.

Motion carried.

XI—c. BY-LAWS CH. 8—SEC. 10 (g)—ELECTION OF COUNCILORS

C. I. Owen, M.D. (Wayne): There is another recommendation by the special committee to study Councilor Districts. That is that some consideration be given to advising counties where new Councilors are needed. Every five years a Councilor is elected from the district. He is elected on recommendation of the component societies. It was also thought by the special committee

that when a vacancy occurs during annual meetings such as this, when the Councilor may be kicked upstairs to another job and a vacancy is created, that the delegates of the counties of that district should be given time to have a caucus to make a recommendation. In order to accomplish that it is necessary to amend the By-laws.

If you turn to page 140 of the Handbook, Chapter 8, Section 10, paragraph (g), it reads:

"It shall elect the Councilors upon the nomination of the delegates of the Councilor District whose Councilor's term expires, as hereinafter provided."

That is part of the regular election. We are recommending the addition of two sentences to that paragraph, as follows:

"Component county societies of Councilor Districts shall be notified in writing by the Secretary of the State Society 60 days in advance of the Annual Meeting when a Councilor is to be elected from their district at the expiration of the usual term. If a vacancy in The Council occurs during an Annual Meeting of the Michigan State Medical Society, the delegates of the component county societies will be given time in which to conduct a caucus in order to consider nomination(s) for the vacancy."

That is proposed as an amendment to the By-laws. Dr. Foster says it is presented at this time as an amendment, to be acted on tomorrow.

XIV—e (3). BY-LAWS CH. 5—SEC. 7

Then we had a resolution to change the By-laws, Chapter 5, Section 7, to delete the word "consecutive" from about the middle of the section. The Section 7 as amended would read as follows:

"Life Member—A Doctor of Medicine who has attained the age of seventy years and maintained an active membership in good standing for twenty-five years in this State Society may, upon his application, and recommendation of his component County Society, be transferred to the Life Members' Roster," and so forth.

Just the one word is taken out, "consecutive." That is to provide for men who have dropped their membership for a year or two, for one reason or another, and then resumed it. Previously those men could not qualify.

I recommend the adoption of this amendment to the By-laws.

THE SPEAKER: Is there a second to that?

F. A. WEISER, M.D. (Wayne): I second it.

Motion carried.

XIV—e (4). BY-LAWS CH. 5—SEC. 9

C. I. OWEN, M.D. (Wayne): The third resolution presented to us was the one presented by Dr. Teed of Washtenaw County, for the Washtenaw County Medical Society.

WHEREAS the By-laws relating to election of members of the Michigan State Medical Society to Retired, Emeritus and Life Membership are indefinite on a certain point; and

WHEREAS a member qualifying for Retired, Emeritus or Life Membership during the interval between the fall meeting of the House of Delegates and the beginning of the following fiscal year would be required to pay dues the following year in order to maintain active membership; and

WHEREAS such provision has already worked a hardship in the Washtenaw County Medical Society: Therefore be it

RESOLVED, That Chapter 5, Section 9 of the By-laws of the Michigan State Medical Society be amended as follows: After the words "Annual Session of the House of Delegates," the following sentence be inserted: "Such certification shall be valid for a period of 12 calendar months, during which time the applicant shall not be required to pay dues."

It is recommended by the committee that this resolution not be adopted. In a word of explanation I might say that there might be an occasional hardship in which case the county society concerned could afford to pay the man's membership. If this were adopted it would open a flood gate; pretty soon it would be two years, three years. The committee felt it was all right just as it is. Maybe we have given too many millionaires free memberships as it is.

THE SPEAKER: The motion is recommending rejection of the resolution. Is there a second?

E. D. SPALDING, M.D. (Wayne): I second it.

THE SPEAKER: Is there any discussion?

O. K. ENGELKE, M.D. (Washtenaw): I believe this recommendation of the committee should not be adopted. I wish all of you could have been on the Washtenaw County Medical Society's Technical Committee for the past few years, when it developed that it was not a matter of the few dollars involved, but a matter of principle. I assure you it was not a matter of a few dollars that the Society would not put up that prompted the drafting of the resolution which, so help me, I cannot believe will disrupt the operation of the Michigan State Medical Society, but it has disrupted the operation of the Executive Council of the Washtenaw County Medical Society for quite a while.

I do not believe the objections of the committee are valid. I wonder if they have any other objections?

C. I. OWEN, M.D. (Wayne): We have no other. We saw no reason to change it. We think if this is adopted, pretty soon it will be two years, and then maybe three years, and perhaps then there won't be anybody paying dues.

O. K. ENGELKE, M.D. (Washtenaw): I submit that no such resolution was presented.

R. J. ARMSTRONG, M.D. (Kalamazoo): I would like to second the opinion of the Washtenaw County group, in the plea of making common sense. If a man has paid his dues in 1950 and retires after this session because of illness, he certainly is entitled to be considered as a retired member, even though this House does not meet until next year.

THE SPEAKER: Is there further discussion?

H. H. RIECKER, M.D. (Washtenaw): Is there a motion before the House that could be superseded?

THE SPEAKER: There is a motion before the House that this be rejected. This is a discussion of the motion.

H. H. RIECKER, M.D. (Washtenaw): I would like to second that motion.

C. K. STROUP, M.D. (Genesee): We just voted to delete from the By-laws the word "consecutive," in the motion just before this one. We were in error on that because it is a change in the By-laws. I believe again we are talking about the By-laws and that this cannot be voted on until it has been tabled for one session.

C. I. OWEN, M.D. (Wayne): This motion is not an amendment to the By-laws. This is a motion to turn down the resolution.

THE SPEAKER: You are correct on the other, however, that that should lay over until the next meeting to be voted upon. However, this is a motion to turn down the recommendation. Are you ready for the question?

Call for the question. Motion carried.

H. H. RIECKER, M.D. (Washtenaw): I move that the report of the Constitution and By-laws Committee concerning this matter be referred back to the committee for reconsideration.

R. A. SPRINGER, M.D. (St. Joseph): I second it.

THE SPEAKER: It does not have to be referred back. It will come up tomorrow automatically as an amendment to the By-laws. You will have a chance to vote on it then.

XIV—f. REFERENCE COMMITTEE ON RESOLUTIONS

The Reference Committee on Resolutions recommends to the House of Delegates the adoption of the resolution, with a slight addition. The resolution will then read as follows, leaving out the Whereas clauses:

XIV—f. 1. Urging Medical Society to Exercise right of franchise

RESOLVED, That the Michigan State Medical Society call upon its members to exercise their right of franchise on November 7, 1950, and on all future opportunities and to persuade their families, patients and friends to do likewise.

The change in the resolution is in regard to the statement, "and on all future opportunities."

I move the adoption of this report.

H. B. Fenech, M.D. (Wayne): I second it.

Motion carried.

XIV—f. 2. Supporting the United Nations

G. T. McKean, M.D. (Wayne): The Reference Committee on Resolutions recommends to the House of Delegates the adoption of the resolution with a slight change, again in the Resolve, as follows:

RESOLVED, That the Michigan State Medical Society reaffirms its determination to halt the socialization of our free economy and pledges its wholehearted support to the United Nations in resisting Communistic aggression in Korea and elsewhere and urges the full collaboration of doctors of medicine with the Armed Forces of the United States.

The change in the resolution is in regard to resisting Communistic aggression in Korea. We have added, "and elsewhere," and also the word, "urges," so that it reads: ". . . and urges the full collaboration of doctors of medicine," and so forth, to slightly clarify the original resolution.

I move the adoption of this recommendation of the committee.

K. B. Babcock, M.D. (Wayne): I second it.

Motion carried.

XIV—f. 3. Urging Development of Simplified Insurance Reporting Form

G. T. McKean, M.D. (Wayne): The committee recommends to the House of Delegates the adoption of the resolution. With the permission of the House of Delegates I will read only the Resolved part of the resolution:

RESOLVED, That the Grand Traverse-Leelanau-Benzie County Medical Society request the Michigan State Medical Society to develop a simplified reporting form which could be used by all insurance companies doing business in Michigan; and

RESOLVED further, That in those instances in which an insurance company insists on a special long complicated form, our membership shall be privileged to make a reasonable charge direct to the company for the completion of such forms.

I move the adoption of the recommendation of the committee.

M. A. Darling, M.D. (Wayne): I second it.

Motion carried.

XIV—f. 4. Study of Nursing Needs

G. T. McKean, M.D. (Wayne): The Reference Committee on Resolutions recommends the approval of the resolution in principle, but with a change of wording, as follows:

WHEREAS it is a recognized fact that there are insufficient nursing services available for public needs; and

WHEREAS present programs for the training of nurses have developed which do not fill these needs: Therefore be it

RESOLVED, That further efforts be made to ascertain the public needs in regard to nursing services and to develop programs to provide for such services.

May I say that the spirit of the resolution was not changed in any respect. It is simply a matter of changing words. I move the adoption of this recommendation.

F. A. Weiser, M.D. (Wayne): I second the motion.

Motion carried.

The Speaker: Since there is a further report to come from the reference committee we won't ask for a motion now on the committee report as a whole.

XIV—g. REFERENCE COMMITTEE ON SPECIAL MEMBERSHIPS

XIV—g. 1. Emeritus Membership

D. H. Kaump, M.D. (Wayne): The Reference Committee on Special Memberships would like to certify the following names for **Emeritus Membership:** G R. Pray, M.D., Jackson; L. L. Stewart, M.D., Jackson; James Henry, M.D., Grand Rapids; E. H. Campbell, M.D., Newberry; F. A. Watts, M.D., Owosso; Bruce Anderson, M.D., Detroit; E. O. Sage, M.D., Detroit; W. J. Stapleton, Jr., M.D., Detroit; C. A. Fettig, M.D., Detroit; L. K. Slote, M.D., Constantine; G. A. Conrad, M.D., Sault Ste. Marie.

D. H. Kaump, M.D. (Wayne): I move the adoption of this portion of the report.

J. E. Lofstrom, M.D. (Wayne): I second it.

Motion carried.

XIV—g. 2. Life Membership

D. H. Kaump, M.D. (Wayne): The Reference Committee on Special Memberships has certified the following members for **Life Membership:** Wilfrid Haughey, M.D., Battle Creek; M. R. Sutton, M.D., Flint; F. L. Covert, M.D., Flint; A. J. Reynolds, M.D., Flint; D. C. Smith, M.D., Flint; E. G. Bellinger, M.D., Lansing; F. M. Huntley, M.D., Lansing; Ferdinand Cox, M.D., Jackson; W. H. Enders, M.D., Jackson; G. C. Hicks, M.D., Jackson; A. J. Baker, M.D., Grand Rapids; F. A. Boet, M.D., Grand Rapids; S. W. Thieme, M.D., Ravenna; W. C. Swartout, M.D., Muskegon; John Sundwall, M.D., Ann Arbor; C. D. Camp, M.D., Ann Arbor; Mark Marshall, M.D., Ann Arbor; Cornelius Carey, M.D., Detroit; J. C. Dodds, M.D., Detroit; B. U. Estabrook, M.D., Detroit; G. A. Kamperman, M.D., Detroit; E. G. Martin, M.D., Detroit, R. W. Hodges, M.D., Atlanta and Isaiah Sicotte, M.D, Michigamme.

D. H. Kaump, M.D. (Wayne): I move the adoption of this portion of the report on Life Memberships.

E. B. Miller, M.D. (Manistee): I second it.

Motion carried.

D. H. Kaump, M.D. (Wayne): Four members of the State Society were recommended for Life Memberships. Their period of membership in the State Society varies from thirty to thirty-three years of paying dues. However, in no one of these four instances have twenty-five consecutive years elapsed. As a consequence, I would like to move that the names of these four men be held over until after the action on the change in the By-laws is taken tomorrow.

The Speaker: Do you all understand what the request is? There is a proposed change in the By-laws which would make it possible for these men to be so recognized. The motion is that the names be held over until that action is taken.

D. H. Kaump, M.D. (Wayne): That is correct.

E. D. King, M.D. (Wayne): I second the motion.

Motion carried.

XIV—g. 3. Associate Membership

D. H. KAUMP, M.D. (Wayne): The Committee on Special Memberships noted that the following members are certified for Associate Membership: W. A. Southwick, M.D., Springport; J. T. Jiroch, M.D. Muskegon; L. W. Hayes, M.D., Grand Rapids; Stuart Bergsma, M.D., Grand Rapids; and the following from Ann Arbor: R. C. Barlow, M.D., R. C. Bates, M.D.. M. F. Bryant, Jr., M.D., Peter Buhrman, M.D., J. L. Caldwell, M.D., C. R. Calley, M.D., F. P. Campbell, M.D., G. B. Carver, M.D., J. S. Chambers, Jr., M.D., J. W. Clay, M.D., C. C. Congdon, M.D., W. T. Couter, M.D., J. C. Crenshaw, M.D., C. R. Denton, M.D., J. H. DeTar, M.D., R. P. Dobbie, Jr., M.D., R. M. Edwards, M.D., Philip Erlich, M.D., T. N. Evans, M.D., S. S. Fajans, M.D., S. B. Feinberg, M.D., M. M. Figley, M.D., G. R. Forrer, M.D., W. W. Glas, M.D., S. M. Gould, Jr., M.D., C. B. Hall, M.D., H. R. Hume, Jr., M.D., J. S. Jacob, M. D., H. T. Johnson, M.D., W. R. Johnson, Jr., M.D., E. W. Johnston, M.D., W. J. Kenfield, M.D., J. S. Krieger, M.D., W. T. Kruse, M.D., A. E. Lamberts, M.D., H. B. Latourette, M.D., J. B. Ludwig, M.D., H. D. Lueken, M.D., J. A. McHale, M.D., J. F. MacGregor, M.D., K. R. Magee, M.D., J. E. Magielski, M.D., G. L. Neligh, M.D., R. B. Neligh, M.D., M. C. Nelson, M.D., J. E. Orebaugh, M.D., D. C. Overy, M.D., G. S. Pulford, M.D., D. K. Ray, M.D., T. G. Reed, M.D., R. M. Rees, M.D., R. E. Reichert, Jr., M.D., R. J. Rowe, M.D., W. H. Ruchie, M.D., W. S. Smith, M.D., O. A. Steinnon, M.D., R. L. Thirlby, M.D., R. F. Thompson, M.D., W. H. Thompson, M.D., Paul Van Portfleit, M.D., C. H. Ward, M.D., C. E. Wheeler, M.D., W. S. Wille, M.D., C. M. Wilson, M.D., F. B. Zaugg, M.D., S. G. Zawacki, M.D.

D. H. KAUMP, M.D. (Wayne): Dr. Steward of Grand Rapids has become a medical missionary and wishes to transfer to some membership other than Active Membership. There is some question on this because there is no category in the membership which will allow for such an activity. However, we felt that it was a justifiable activity and that we were justified in transferring this man from Active to Associate Membership.

In addition to these names, there were a number of hospital residents' names submitted, one from Grand Rapids and a large number from Ann Arbor. I will not read those names, with your permission.

I move the adoption of this portion of the report.

R. W. TEED, M.D. (Washtenaw): I second it.

Motion carried.

XIV—g. 4. Retired Membership

D. H. KAUMP, M.D. (Wayne): The Committee on Special Memberships recommends for Retired Membership the following persons: T. G. Yeomans, M.D., St. Joseph; E. M. McCoy, M.D., Grand Ledge; Wm. Scholten, M.D., Kalamazoo; C. L. Grant, M.D., Manistee; W. S. Ferguson, M.D., Grand Rapids; L. D. Harrison, M.D., Flint; E. M. Ling, M.D., Spring Lake; A. R. Ernst, M.D., Saginaw; F. C. Bandy, M.D., Sault Ste. Marie.

D. H. KAUMP, M.D. (Wayne): I move the adoption of this portion of the report.

R. W. TEED, M.D. (Washtenaw): I second it.

Motion carried.

D. H. KAUMP, M.D. (Wayne): In addition there is one man who has been an active member for twenty-seven consecutive years. However, his 1950 dues have not been paid. If the change in the By-laws is passed tomorrow he will be eligible for Retired Membership. Therefore, I would like to move that we table the application of this one individual for Retired Membership and reconsider it tomorrow after the action on that amendment is taken.

M. A. DARLING, M.D. (Wayne): I second it.

Motion carried.

XIV—g. 5. Honorary Membership

D. H. KAUMP, M.D. (Wayne): The Committee on Special Memberships certifies for Honorary Membership the following two individuals: C. E. Tompkins, M.D., Benton Harbor, and C. E. Kahlke, M. D., Benton Harbor.

D. H. KAUMP, M.D. (Wayne): I move that the names of these individuals be certified for Honorary membership.

C. R. GATLEY, M.D. (Oakland): I second it.

Motion carried.

D. H. KAUMP, M.D. (Wayne): I move that the entire report be accepted.

E. D. KING, M.D. (Wayne): I second it.

Motion carried.

XIV—h. REFERENCE COMMITTEE ON LEGISLATION AND PUBLIC RELATIONS

XIV—h. 1. Urging Increase in Number of Medical Graduates

L. T. HENDERSON, M.D. (Wayne): One is a resolution on the campaign to increase the number of graduates from the Michigan medical schools. The committee as a whole approves this resolution and moves its adoption.

THE SPEAKER: Do you wish the resolution part read?

L. T. HENDERSON, M.D. (Wayne): I will read that part.

RESOLVED, That the Michigan State Medical Society continue and increase its efforts to gain further funds from the Michigan legislature and from the people of the State of Michigan, by concentrated drives and through contacts on a permanent basis for contributions, to the end that, (a) adequate facilities (school buildings) are supplied the two medical schools in Michigan, and (b) necessary additions to the faculty of these two Grade A schools of Michigan are made by routinely training a requisite per cent of each medical school class to become teachers; and be it

RESOLVED further, That the Michigan State Medical Society offer its co-operation to the presidents and medical deans of the University of Michigan and the Wayne University for the development of an aggressive and early campaign to secure from the State of Michigan and from alumni and other citizens who are interested in better health, funds necessary to enlarge medical facilities and faculties in this state to the end that the resulting increase in the number of medical graduates from the University of Michigan and Wayne University is sufficient to continue to give adequate and good quality medical care to the people of this state.

The committee approves this resolution, and moves its adoption.

J. E. LOFSTROM, M.D. (Wayne): I second it.

Motion carried.

XIV—h. 2. More Funds for Wayne Medical School

L. T. HENDERSON, M.D. (Wayne): We have a resolution from Wayne County, presented by Dr. Babcock. I will read that.

WHEREAS the present world situation appears to demand a lasting increase in the Armed Forces of the United States and consequently an increased need for medical personnel for an unpredictable length of time; and

WHEREAS there already exists some shortage of physicians not only for the Armed Forces but also for civilian needs; and

WHEREAS attempts to increase the educational facilities of Wayne University Medical School have fallen far short of the reasonable goals in spite of the fact that there is a wealth of unused clinical material in Wayne County; and

WHEREAS funds for the maintenance of such medical

educational facilities as are already provided are barely adequate to furnish a minimum of teaching and research personnel: Therefore be it

RESOLVED, That The Council of the Michigan State Medical Society direct suitable efforts toward securing further funds from the State of Michigan for the maintenance of the Wayne University Medical School, the second and only other medical school in the state.

The committee approves this resolution and moves its adoption.

F. A. Weiser, M.D. (Wayne): I second it.

Motion carried.

XIV—h. 3. Recommending Change in Coroner System

L. T. Henderson, M.D. (Wayne): The next resolution has to do with the duties of the coroner. I will read the resolution part.

RESOLVED, That the Michigan State Medical Society initiate action in attempting to legislate a change in our present coroner system to effect the abolishment of the county coroner system and the adoption of a system of appointed medical examiners who are qualified doctors of medicine.

The committee approves the resolution and moves its adoption.

R. A. Springer, M.D. (St. Joseph): I second it.

Motion carried.

XIV—h. 4. Requesting Report of P.A. 59 of 1937

L. T. Henderson, M.D. (Wayne): The next resolution has to do with the basic science law.

The Speaker: Since there is so much interest in this, it perhaps had better be read.

L. T. Henderson, M.D. (Wayne): I will read the entire resolution, then.

WHEREAS the basic science law was enacted by the legislature in 1937 as Public Act No. 59 after many years of study by the Michigan State Medical Society; and

WHEREAS the original concept was entirely worthy in principle, and it was hoped that it would raise the standard of the healing arts in the State of Michigan; and, however,

WHEREAS the experience of the past 13 years has demonstrated that the original concept has not been accomplished but rather the reverse, and in fact the citizens of Michigan have been deprived of the services of many well qualified physicians; and further

WHEREAS this has resulted from two particular effects of this law: (1) It has discouraged highly trained physicians from undertaking examinations in courses of study in which they qualified years previously; and (2) it has discouraged continued study and training in the institutions of this state by young men in view of lack of licensure and the necessity of additional examinations in subjects in which they themselves have already qualified and thereby imperiled the entire resident training program of the hospitals throughout the state; and

WHEREAS there have been manifold other objections to the practical application of this law: Therefore be it

RESOLVED, That this House of Delegates goes on record as favoring repeal of the Public Act No. 59 of the regular session of the legislature of the State of Michigan, 1937; and be it

RESOLVED further, That this House instruct The Council and the officers of the Michigan State Medical Society to sponsor through its legislative committee the necessary legislation to accomplish repeal of the above-named act.

The majority of the committee have approved this resolution. I move its acceptance.

H. F. Dibble, M.D. (Wayne): I second it.

The Speaker: Is there any discussion?

F. D. Johnson, M.D. (Genesee): I would like to hear from Dr. Christian, the man who followed the legislation and knows the thinking on it. I think he is quite capable of telling us all about it.

L. G. Christian, M.D. (Ingham): I first wanted to correct Dr. Donaldson. He said I was in favor of repeal. I introduced the resolution this morning, as you remember, at the insistence of the County Medical Society. I am not in favor of the repeal of this law because the conception of it was right. I am in favor of changing the law, if possible. Whether that is a practical thing or not I do not know. I still believe in the basic principles of basic science. I think the law has not worked properly, however, and I would like to see it amended. That is my personal opinion. My County Society unanimously instructed me to introduce this resolution. Therefore I will go along at the insistence of my County Society for repeal. However, my own personal opinion is that we should save the application and the original conception of the law and make it workable if that is possible. I am not for repeal, personally. Have I made myself clear on that?

Member: Why aren't you in favor of it?

L. G. Christian, M.D. (Ingham): You ask why I am not in favor of repeal? Because I believe in the principle that the State Medical Society over a period of years has attempted to raise the standards of the practice of the healing arts. I still think it is a good principle and I think the law perhaps is not working properly. However, I feel there is a possibility of making it work.

J. H. Schlemer, M.D. (Wayne): Has the question ever been thoroughly studied by a committee of the Michigan State Medical Society?

The Speaker: I am informed that Dr. Ledwidge headed a committee of six at one time to study this. That was two years ago, I believe.

J. H. Schlemer, M.D. (Wayne): What solution did that committee arrive at?

The Speaker: I think that can be answered by our legal counsel, Mr. Herbert, who may have some remarks on that. I wonder if this is not the time to ask him to take the floor? I want the delegates to discuss this to their hearts' content, but I do not think we should come to a decision or vote without listening to Mr. Herbert.

J. H. Schlemer, M.D. (Wayne): I will yield the floor to him.

Mr. Herbert discussed this subject from a legal standpoint.

J. H. Schlemer, M.D. (Wayne): We do not turn the legislature on and off like a faucet. Once a law has been repealed, to get them to adopt another law to take its place is like pulling hen's teeth.

I move that there be a committee appointed from the Michigan State Medical Society to make a thorough study of this situation with the view of amending this law. It is much easier to amend a law than it is to repeal it and have another one enacted to take its place. This Society should study this thing thoroughly, through a committee, with the view of amending the law where necessary, to make it workable, and to place it in the hands of the physicians where it belongs. That is my motion.

R. A. Springer, M.D. (St. Joseph): I second the motion.

The Speaker: I cannot accept it as a motion at this time. There is a motion on the floor.

J. H. Schlemer, M.D. (Wayne): I did not realize there was a motion on the floor. I therefore make my motion as an amendment to the motion on the floor. As far as the committee is concerned, I think it should be a special committee, appointed by the President of the Michigan State Medical Society himself, for the sole purpose and intention of reviewing the situation, with the view of amending the law.

R. A. Springer, M.D. (St. Joseph): I second it.

The Speaker: Will you state the number on the committee to be appointed by the President of the Michigan State Medical Society, for referral of the question?

J. H. Schlemer, M.D. (Wayne): That is questionable. I don't care how many, just so they are competent to study the law and to offer amendments or to try to get amendments enacted. Leave that to the discretion of the President of the Michigan State Medical Society.

The Speaker: A seven-man committee?

J. H. Schlemer, M.D. (Wayne): A seven-man committee would be fine.

The Speaker: The motion, as I understand it, is that there be a special committee of seven, appointed by the President of the Michigan State Medical Society, to study the revising of the Basic Science Law.

J. H. Schlemer: That they recommend amendments to the law and that they make a special effort, or bring back their report and let the Michigan State Medical Society make an effort in some manner, to have the legislature amend the act.

The Speaker: Further that they recommend amendments to the law and report back to the House of Delegates.

Do you want to amend this motion that the committee be instructed to report back to The Council rather than the House of Delegates?

E. S. Parmenter, M.D. (Alpena-Alcona-Presque Isle): I would like to do so.

P. E. Sutton, M.D. (Oakland): I second it.

The Speaker: Is there any further discussion?

R. S. Breakey, M.D. (Ingham): Professor Henry once told me, when I got a little dogmatic, where would the Constitution of the United States be if each of the thirteen colonies had returned home, feeling individually that each had failed? The success of the country arose from a spirit of giving a little and taking a little.

I come instructed just as Dr. Christian did. I feel that the amendment is a very good one. A further program of study will do no harm. Such a committee, a special committee whose sole purpose is to evaluate the good or bad of this law, is a very good idea.

I heartily endorse this amendment. I should like, however, to suggest that the report of such a committee be made to the House of Delegates in full session next year, and not to The Council alone.

E. D. Spalding, M.D. (Wayne): I move the previous question on the main issue and all the amendments.

C. I. Owen, M.D. (Wayne): We should not hamstring the committee. Let the committee make what amendments it wishes, or what recommendations it desires. He will withdraw that part of the amendment that instructs the committee. I will go along with it.

J. H. Schlemer, M.D. (Wayne): It is not my intention to hamstring the committee at all. I will withdraw that part of my motion.

The Speaker: Is it acceptable to the seconder?

R. A. Springer, M.D. (St. Joseph): Yes.

The Speaker: Are you ready for the question on the motion as amended, **to have a special committee report to The Council?** If you vote against that, then you throw it back to the original amendment which makes the committee report to the House of Delegates. **The first vote will be taken on whether you wish such a committee to report to The Council.**

(Call for standing vote)

The Speaker: The Chair rules that the motion is lost. Now, the original referral motion was **that the special committee report to the House of Delegates.** All in favor of that say, "aye;" opposed? **That motion is carried.** That motion supersedes the original motion that was discussed, and it really defines it, so there is no need for a vote on the original motion. The question has been referred to a special committee by your vote.

L. T. Henderson, M.D. (Wayne): I would like to move that the report of the committee as a whole be adopted.

The Speaker: The motion is that the report of the committee as a whole, as amended, be adopted. Is there a second to the motion?

The motion was severally seconded and carried.

XIV—i. REFERENCE REPORT ON EXECUTIVE SESSION

The two matters referred to this Reference Committee were reported on.

The session was adjourned at 12:05 a.m.

TUESDAY MORNING SESSION

September 19, 1950

The House of Delegates reconvened at 10:10 a.m.

The Speaker: I wish to remind you gentlemen and also the Sergeant-at-Arms that we are still in Executive Session.

The Speaker: The next order of business is the report of the Reference Committee on Reports of the Council, dealing with dues.

XIV—b. 6. MSMS Dues for 1951

C. K. Hasley, M.D. (Wayne): The Reference Committee on Reports of the Council has met again and has carefully considered the question of dues. We have come to the same conclusion on the resolution of the Council, No. 6, which reads as follows:

That the annual dues of the Michigan State Medical Society be set at $50 to provide necessary appropriations for the various purposes in the work of the Michigan State Medical Society.

We have changed that to read:

The committee appreciates the tremendous work that the Michigan State Medical Society is doing and the need of additional funds for expanded activities. The committee recommends that the annual dues be set at $45 per year.

We have come to that conclusion because we feel there is a necessity for it. I would like to give you a few figures to substantiate our line of thought. You will recall that for three years the sum of money allocated to public education was approximately $30,000, so that within the three years they accumulated a sum of $100,000, which was set up as a reserve. On January 1, 1949, they had on hand this $100,000 fund which had been set up. However, due to the increased expense in carrying on the activities of the Society that particular fund was depleted, so that on January 1, 1951, they will have an estimated $54,049 left out of the $100,000. In other words, $55,000 has been taken from that fund to carry on the activities of the Society. That shows there is a need.

Another thing is that I think some of the amendments that were offered last night were due to an erroneous impression. If this dues increase to $45 is passed it will mean an increase of only $8, because the $45 absorbs the $25 special assessment. The term "special assessment" is deleted by the passage of this motion. So we will have no trouble in regard to reporting it for income tax returns.

The $8, if you break it down a little further, means between 2 and 3 cents a day. There is nobody starting out in medicine who cannot afford 2 or 3 cents a day. In other words, it is about two packages of cigarettes a month. Consequently, we feel that anyone can stand that, and there is no need of attaching any riders to this resolution.

I move the adoption of this recommendation of the committee, which is $45 dues per year.

R. S. Ballmer, M.D. (Midland): I second it.

The Speaker: I think there is some discrepancy in

the figures given you. I will ask Dr. Osius to make a report.

E. A. Osius, M.D. (Wayne): Of the $25 assessment you paid, each of the succeeding years up to 1949 a certain sum was taken out and was put aside in what was known as the reserve fund. Over a period of time that amounted to roughly $100,000. That was a reserve or sheet anchor fund, so that if the pressure got to be pretty bad we could use that in certain directions. That was to be spent at the direction of The Council. A special committee in which the Finance Committee chairman sat and several other members of The Council was appointed to supervise the distribution of that particular sum of money. The rest of the money obtained from the $25 assessment was used for current public relations. It has been so used since that time.

Now, the $100,000 reserve fund has run out, as of this month, or there is only a balance of $1,000, or thereabout. The public relations money from the $25 assessment is being used right along, and at the end of this year there will be, we believe, about $50,000 balance in that particular fund.

Now, that may sound like a lot of money, but it is not. The expense of everything has gone up, plus the fact that it takes money to put that sort of thing on.

There is a budget for next year for the public relations fund of roughly $140,000, estimated. Budgets always have to be estimated high in order to come somewhere within striking distance. We hope it will be lower. However, in the $140,000 budget is an ear-marked fund of $30,000 which is to again start on a so-called reserve fund.

The reason that we ask for an increase in dues is this: It has nothing to do necessarily with the public relations end of it. That is to be handled from the $25. We have what is known as a general fund, which has to do with salaries, the salaries of the people who are in the office. Incidentally we have 15 employes in the Michigan State Medical Society now, and the salary budget is not very low, from the standpoint of total amount. It pays for postage, for printing, for telephone, telegraph, it pays for things like the Postgraduate Institute, for things like the state meeting that you are sitting at here, and so forth. The monies obtained to run the general fund come out of the dues, the $12.

We have found through the bookkeeping—which is in the hands of Bob Roney, who is a capable bookkeeper and auditor, that each year, in 1948 and 1949, we have dropped behind what we should. So by order of The Council, $5 of the $25 assessment, which was scheduled for public relations, was used to make up the so-called bookkeeping deficit in the general fund.

The way that was justified was this: These two functions, public relations and the general fund, have many inter-lacing and inter-communicating functions; it is impossible to separate one from the other. For example, the public relations group will do things for the general fund, and the general fund will do things for public relations, and so on. So in a sense they are so inter-locking that it is almost impossible to separate each individual item. We thought it was better, however, from a bookkeeping standpoint, to have these things clear and have each one in a sense carry its own share and be so specified in the books. On the other hand, we have this to combat: The increased cost, for example, of space. We have to enlarge the office space in the Olds Tower. They were practically triple-decking the desks for a while. If any of you doubt that we invite you to come up and take a good look. The salaries have had to be increased from time to time to keep pace with the average living costs, which you all know about just as well as I do. Everything else has gone up: Printing, employes, rent, light, the whole business. As you all know, in the last 10 years there has been over a 100 per cent increase in expenses of all sorts, just to stay alive, to put it bluntly and frankly.

That is the reason we have asked for an $8 increase. The general deficit, the bookkeeping deficit—understand, not an actual red deficit—has been running on the average of about $11,000 out of the general fund for a year. It was $14,000 in 1949 and $8,000 in 1948, which averages about $11,000. This year we think the deficit will be about $5,000, which may be made up in part by a small profit that The Journal sometimes makes through advertising, and so on. So generally speaking we are in pretty good shape. On the other hand, we feel we should anticipate a little bit and look ahead.

There is one other point that we feel is important from the standpoint of raising dues, which is this: We expect shortly to lose a fair number of members to the military service; if not to lose, at least not to get our quota of new men as they come out of school. That will have to be met in some way. Hence, the $8 increase will tend in some sense to cushion that. Also, we do not think for a minute that the living expenses are going to stand static, nor do you. Those are the reasons for the recommended increase in dues.

We have sent around to various other states and inquired what they were doing. We found many states have $10 and $15 dues, and some have special assessments. However, we did find that the progressive states, of which I am glad to say we are one, if not the foremost member, ran about $50. Among those states are California, Oregon, Colorado, et cetera.

I think the program the Michigan State Medical Society has put on in the last years in all directions deserves a lot of commendation. It has stood out in front in many things. Some of the things we advocated as far back as five, six and seven years ago are now being picked up by the other organizations and by the American Medical Association, and so on, are being aped. Gentlemen, there is no greater compliment than to be copied.

Now, if you wish to cut down the program, if you wish to bring it down to a different level, that is your perfect right as delegates to so instruct us. If you wish to keep up what we are doing—and I believe what we are doing is in all respects done with good intent, with possibly mistakes here and there, because after all, the Councilor is human, too; they get tired of sitting from 10:30 in the morning until 12:30 at night, not once in a while but steadily, so they might make a few mistakes here and there. They might allot a certain sum of money that you think is not of great benefit, and another man might think it is of great benefit, so in an organization of this kind you have to strike a happy medium. However, I think a good job has been done, and it is well worthwhile keeping it up. I think the request for the extra dues is not unjustified, and I believe that your confidence will not be destroyed in the handling of those funds. Thank you.

The Speaker: There is a motion before you to adopt the recommendation of the committee. Is there any other discussion?

Call for the question. Motion carried.

The By-laws Committee will please report at this time.

XIV—e. 4. By-Laws Chap. 5, Sec. 9

C. I. Owen, M.D. (Wayne): There was one subject to be reported on last evening that was misunderstood by practically everyone I talked to, about twenty-five or thirty. For that reason I am going to move a reconsideration. That is the resolution presented by Washtenaw County amending Chapter 5, Section 9. That reads as follows:

Whereas, the By-laws relating to election of members of the Michigan State Medical Society to Retired, Emeritus and Life Membership are indefinite on a certain point; and

Whereas, a member qualifying for Retired, Emeritus or Life Membership during the interval between the fall meeting of the House of Delegates and the beginning of the following fiscal year would be required to pay

dues the following year in order to maintain active membership; and

WHEREAS, such provision has already worked a hardship in the Washtenaw County Medical Society: Therefore be it

RESOLVED, That Chapter 5, Section 9 of the By-laws of the Michigan State Medical Society be amended as follows: After the words, "Annual Session of the House of Delegates," the following sentence be inserted: "Such certification shall be valid for a period of twelve calendar months, during which time the applicant shall not be required to pay dues."

E. D. SPALDING, M.D. (Wayne): In view of the fact that you cannot get anybody to move to reconsider, I will move that it be rescinded.

F. A. WEISER, M.D. (Wayne): I second the motion. Motion carried.

THE SPEAKER: Now, Dr. Owen, your motion is in order.

C. I. OWEN, M.D. (Wayne): The recommendation of the Reference Committee on Constitution and By-laws is that this resolution not be adopted and that this amendment not be made. I so move.

B. M. HARRIS, M.D. (Washtenaw): I second it.

THE VICE SPEAKER: As I understand it now, there will be no change in the By-laws regarding this matter. That is the motion. Is there further discussion?

R. W. TEED, M.D. (Washtenaw): Do I understand that if we vote "yes" on this motion that, in effect, the resolution is defeated?

THE VICE SPEAKER: That is correct.

R. W. TEED, M.D. (Washtenaw): I would like to go back a bit and explain why this resolution was presented. I won't bore you with all the difficulties and details we have had in the Executive Council as a result of this problem. I would simply like to point out that there is an injustice in the By-laws as they are now written. If a man reaches 70 on the day after the House of Delegates closes its meeting he cannot apply for Life Membership until another year. In other words, he is being penalized, because another man who becomes 70 a week before the meeting could be certified for Life Membership and could be transferred to that rostrum.

It was our feeling that it was unjust to discriminate against the man who happened to be born after the House of Delegates meeting in favor of the man who was fortunate enough not to be born after the meeting, but before. We therefore feel this injustice should be corrected and the By-laws changed.

E. D. SPALDING, M.D. (Wayne): I am on this committee whose report you just heard. The committee is perfectly in sympathy with the fact that in individual cases injustice is done which should be corrected. However, the best method of correction is not to correct your By-laws. There are many cases where such action is taken to change a membership, in which finances are of no consideration. If you open the door by changing your By-laws you are depleting your treasury by withdrawing the dues of someone perfectly able to pay them. In the individual cases where a gross injustice is being done The Council is delighted to recognize such. All you need to do is to write the facts of such a case to The Council. The Council will be glad to make a special provision for the cancelling of dues in such a case. These cases should be considered on their individual merits and not make a blanket change in the By-laws. That is the reason the committee is quite in favor of what you specifically want to do, but they are trying to point out to you that you are not trying to do it in the wisest way.

O. K. ENGELKE, M.D. (Washtenaw): I think Dr. Spalding's philosophy is excellent. However, the practical application over the last year was just not there. This thing has been in and out of The Council just about as often as it has been in and out of the Executive Council of the Washtenaw Medical Society. We did not get to first base. We wasted an awful lot of time. I think philosophy is okay, but this philosophy is getting expensive. I would like to point out that this is not the only case; that there is another case pending before this group which will be discussed immediately following whatever action is taken on the motion, where a similar condition has arisen. Now, are we so hard up with the increase in dues that we have to ask a man who has reached 70 to kick in with his $20 to maintain the Michigan State Medical Society, and have to in effect tell him, "We're sorry, Bud, but we cannot use you"? We passed a motion just a few moments ago that should put us on a fairly sound financial footing.

I would like to point out also that the men who have reached seventy do not like to be placed on charity. They do not like to have special motions made so that they do not have to pay dues. I think there is a principle involved. I would like to know what harm there is in this thing, except the loss of a few bucks.

C. K. STROUP, M.D. (Genesee): I would like to ask a question. Is not this proposal as put up in the first place an idea to change the fiscal year? After all, we have to have a fiscal year sometime. If we did it the way Washtenaw is asking the man would get it if he became sixty-nine. I think it should be left at seventy.

O. K. ENGELKE, M.D. (Washtenaw): I don't know how the last issue was raised. Nobody said anything about changing the fiscal year. What you are in effect saying, though, is that some people have to be seventy-one.

G. T. MCKEAN, M.D. (Wayne): I am secretary of the Wayne County Medical Society. We were turned down by The Council in a similar request, when we asked that the dues be put off in 1950 in regard to someone who had turned seventy. That is particularly in answer to Dr. Spalding's comment about The Council activity on this.

E. D. SPALDING, M.D. (Wayne): Could we hear from Dr. Sladek, past president, who sat on The Council for years? I think he can talk to you on the subject.

E. F. SLADEK, M.D. (Grand Traverse-Leelanau-Benzie): This question of special memberships has been a sore spot with The Council. There have not been many, but there have been occasional instances when there has been a request that a member be admitted to one of the special categories of membership. In most cases there has been presented insufficient evidence. Very few cases have shown that it would be a hardship to pay the additional year's dues. In those cases where a definite hardship is proven by a statement by the candidate we have eliminated the payment of that extra year's dues and have granted the membership. You have to present sufficient evidence for us to make that decision. However, we do consider each case individually.

THE VICE SPEAKER: The motion on the floor is, in effect, that there be no change in the By-laws regarding this matter.

Call for the question. Motion carried.

XIV—e. 5. Creating Section on Gastroenterology and Proctology

C. I. OWEN, M.D. (Wayne): The next resolution was presented by Dr. Sladek, last evening, and was referred to this committee:

WHEREAS, there is an ever-increasing interest in diseases of the anus, rectum and colon; and

WHEREAS, there are more doctors of medicine devoting their efforts in all or part to these conditions; and

WHEREAS, a section in the Scientific Assembly of the Michigan State Medical Society on the subject of rectal and colon diseases could contribute greatly to the scientific program of the State Society and its Postgraduate Institute; and

WHEREAS, there is now a Michigan Proctologic Society: Therefore be it

RESOLVED, That the House of Delegates of the Michi-

gan State Medical Society approve the development of a section on Proctology.

The committee discussed that this morning. Here are a few facts: There is a Board of Proctology. There are forty-seven doctors in Michigan listed in the American Medical Association as interested in proctology. There are thirty-two members who claim they are practicing it exclusively. The committee did not feel that this was a sufficient number to warrant the establishment of a section on proctology. We do recognize, however, that the American Medical Association has a section on gastroenterology and proctology. Therefore, the committee amended the resolution to read as follows:

That the House of Delegates of the Michigan State Medical Society approve the development of a section on gastroenterology and proctology.

There is no place in the Constitution or By-laws that sets up sections. There is simply a Scientific Assembly provided for. The Scientific Assembly is apparently autonomous, or at least under The Council. There is no way of knowing from the Constitution and By-laws. However, the committee does approve of this resolution and recommends its adoption as amended. I so move.

E. D. Spalding, M.D. (Wayne): I second it.

Motion carried.

XIV—e. 3. By-Laws Ch. 5—Sec. 7, Re Life Membership

C. I. Owen, M.D. (Wayne): There are two proposed amendments to the By-laws, read last night. They have to be read again this morning and acted on this morning, last night having been the first time of presentation. The first amends the By-laws on the question of Life Membership, as follows: Chapter 5, Section 7, is changed to delete the word "consecutive" between the words "twenty-five" and "years." Previously, in order to be a Life Member a person must have been a member for twenty-five years consecutively. It is recommended that the word "consecutive" be dropped because of persons who for any number of reasons may have dropped their membership for a year or two. The county society may have been inactive, or perhaps it was during the depression, or any number of reasons.

I move the adoption of this recommendation.

R. S. Breakey, M.D. (Ingham): I second it.

Motion carried.

XIV—e. 2. By-Laws Ch. 8—Sec. 10—Par. g—Re-election of Councilors

C. I. Owen, M.D. (Wayne): There was an amendment to the By-laws in regard to a special committee to study Councilor Districts. This amendment was to Chapter 8, Section 10, paragraph g, which occurs on page 140 of the handbook. The amendment read last evening is as follows: That two sentences be added to this paragraph, the first sentence as follows:

Component county societies of Councilor Districts shall be notified in writing by the Secretary of the State Society 60 days in advance of the annual meeting when a Councilor is to be elected from their District at the expiration of the usual term.

At the present time Councilors are chosen for five years. The Districts are supposed to recommend the election of the Councilor. Many times they neglect to do anything about it because it has not been called to their attention.

The second sentence is more important:

If a vacancy in The Council occurs during an annual meeting of the Michigan State Medical Society the delegates of the component county societies will be given time in which to conduct a caucus in order to consider nomination(s) for the vacancy.

The reason for this sentence is that occasionally a Councilor is elected to a new position when there is an election of officers. That requires a new Councilor for that District. This makes it mandatory for the group of county delegates to withdraw and consider the recommendations for a new Councilor, rather than one spontaneously being recommended from the floor.

R. V. Walker, M.D. (Wayne): I second it.

Motion carried.

C. I. Owen, M.D. (Wayne): I move the report of the committee as a whole be accepted.

J. J. Lightbody, M.D. (Wayne): I second it.

Motion carried.

XIV—j. 1. Reference Committee on Medical Service and Prepayment Insurance. Reimbursement of Attending Physician by MMS

R. L. Novy, M.D. (Wayne): There was only one item that came before the committee. The committee met with the men interested in the proposition, and the committee made their decision. I will read the resolution. (See Page 1476.)

R. L. Novy, M.D. (Wayne): It was the unanimous feeling of the committee that this was nothing more than an attempt to legitimatize fee splitting. It is unethical, as the Whereases indicate. It is unethical for the consultant to split fees. It was the feeling of the committee, and admitted by the proponents of this, that the problem is primarily an ethical one and should come up when fee splitting becomes ethical. Then the insurance problem can be taken up and it can be accomplished if the ethics of fee splitting are accepted in this Society.

It is therefore the recommendation of this committee that this be disapproved. I so move.

T. P. Wickcliffe, M.D. (Houghton-Baraga-Keeweenaw): I second it.

The Speaker: Is there any discussion?

J. R. Rodger, M.D. (Northern Michigan Medical Society): The situation that was apparently apparent when the resolution was presented has in part been solved by the decision of the Executive Office of the College of Surgeons, even though I am sure the decision is unknown to about 95 per cent of the men of the College. In our section of the country one of the surgeons who never split fees with anyone was perturbed by a question put to him by a younger colleague who very frequently referred cases to him. He went along and assisted at the operation. In the usual way he presented a separate fee. However, he was stumped when it came to the question of what to do when a patient paid with one check, either from a government agency or Blue Cross. That question was presented to the Executive Secretary of the College of Surgeons.

In a ruling given by letter to this particular member of the College a term was, I think, coined. It was called an adjudicated fee. In the letter it was stated to the surgeon that a member of the College paid by one check from a government agency or from an insurance plan could pay to an assistant who referred the case and who actually assisted a fee which was commensurate with his service, which would be called an adjudicated fee and which, in the opinion of the Executive Secretary of the College of Surgeons was not fee splitting. That may be a solution to the problem. That has been done for two years in this particular case.

Motion carried.

X—l. INFORMATION TO PUBLIC ON ATOMIC DISASTER

B. M. Harris, M.D. (Washtenaw): I would like to present this resolution:

Whereas, the Emergency Medical Service Committee, the Committee on Atomic and Allied Procedures and other committees of the Michigan State Medical Society are working on problems affecting the health and welfare of the people in respect to civilian defense and in connection with the protection of life in the event of an atomic attack; and

Whereas, the information developed by these com-

mittees can be of maximum service to the people only if it is disseminated to the public in proper fashion; and

WHEREAS, lay publications recently have been devoting extensive space to this problem the medical profession has been planning for the people's medical care protection for the past two years; and

WHEREAS, the Public Relations Department of the Michigan State Medical Society has the means whereby this information can be broadcast: Therefore be it

RESOLVED, That the Public Relations Committee of the Michigan State Medical Society be instructed to devote a portion of its efforts to the education of the public in respect to matters of health and medical care having to do with the dangers posed by atomic attack.

THE SPEAKER: This will be referred to the Reference Committee on Legislation and Public Relations.

X—m. MOTION RE PRINTED REPORTS OF COMMISSION ON HEALING ARTS

R. S. BREAKEY, M.D. (Ingham): I should welcome the opinion of the other members of the House, to clarify the question. **I move that each delegate be permitted to retain his copy of the Report of the Commission on Healing Arts, to use at his best discretion in his own represented area.**

F. A. WEISER, M.D. (Wayne): I second it.

Motion carried.

XIV—f. 5. Supplementary X-Ray and Electrocardiograhic Service Certificate of MMS

G. T. MCKEAN, M.D. (Wayne): There are two resolutions dealing with the same matter which were referred to the Resolutions Committee. For complete understanding, it will be necessary for me to read the substance of the two resolutions.

WHEREAS, the American Medical Association through its Bureau of Medical Economics, its Judicial Council and the House of Delegates has reaffirmed the principle that hospital service plans should exclude all medical services, and the contract provisions of such plans shall be limited exclusively to hospital services, (and so there will be no misunderstanding the House of Delegates of the American Medical Association has stated that, "If hospital service is limited to include only hospital room accommodations, such as bed, board, operating room, medicines, surgical dressings and general nursing care, the distinction between hospital service and medical service will be clear"): and

WHEREAS, the House of Delegates of the American Medical Association has stated that the practice of anesthesiology, pathology, physical medicine and radiology are an integral part of the practice of medicine in the same category as the practice of surgery, internal medicine or any other designated field of medicine; and

WHEREAS, the House of Delegates of the American Medical Association has recommended that Blue Shield and Blue Cross be requested to co-operate to the extent of writing all contracts in such a manner that Blue Shield will cover insurable medical services only and Blue Cross will cover insurable hospital services only; and

WHEREAS, Michigan Medical Service now issues an X-ray and electrocardiographic supplemental certificate only to a holder of a Michigan Hospital Service certificate; and

WHEREAS, the supplemental certificate is reinsured with Michigan Hospital Service in accordance with an agreement between Michigan Hospital Service and Michigan Medical Service, this agreement being an act of questionable legality under the enabling act, and constitutes a subterfuge by which medical service is furnished by a hospital service contract; and

WHEREAS, this subterfuge encourages the corporate practice of medicine by hospitals; and

WHEREAS, this process is contrary to the letter and the spirit of the actions of the House of Delegates of the American Medical Association: Therefore be it

RESOLVED, That the Michigan State Medical Society condemns such acts and subterfuges and instructs its delegates who are members of the Michigan Medical Service to cause such practices to be discontinued by Michigan Medical Service.

The substitute resolution presented last evening to the House reads as follows:

WHEREAS, Michigan Medical Service now issues a supplementary x-ray and electrocardiographic service certificate only to holders of a Michigan Hospital Certificate, which, through a series of bookkeeping steps in effect places the Michigan Hospital Service in the position of insuring a service which the American Medical Association has just reaffirmed is a medical service; and

WHEREAS, the American Medical Association has specifically stated that hospital service contracts should cover only hospital services as published in the JAMA, July 22, 1950, page 1091: Therefore be it

RESOLVED, That the Michigan State Medical Society instruct its delegates who are members of Michigan Medical Service to take neccessary steps to have Michigan Medical Service desist as a party to a practice contrary to the policy of the American Medical Association.

The Resolutions Committee considered at length the resolution presented to the House of Delegates by Dr. F. D. Johnson of Flint and the substitute resolution presented by Dr. C. W. Stroup dealing with the supplemental certificate of Michigan Medical Service allowing complete in-hospital coverage of the costs of x-ray and electrocardiograms. Extensive assistance was given by Dr. Robert Novy, four delegates from Genesee County offered views on these resolutions, and opinions dissenting from those of the Genesee group were presented personally by three radiologists, and, through data offered by the Michigan Medical Service office, from another group of radiologists.

It is the unanimous opinion of the Resolutions Committee that portions of the original resolution had to do with legal matters which did not come within the scope of action of the committee or the House of Delegates.

Your committee cannot accept the views that there is any intention in this contract of Michigan Medical Service to promote the usurpation of medical practice by hospitals, nor that the supplementary service certificate works to this end.

It is, therefore, the recommendation of your committee that these resolutions be disapproved. I so move.

J. W. LOGIE, M.D. (Kent): I second the motion.

THE SPEAKER: Is there any discussion?

C. W. COLWELL, M.D. (Genesee): I am very sure I represent my constituents and I don't have to go back for instruction on this. We were enlightened quite a lot this morning in the presence of the Reference Committee when we were told that pressure had been put on the Michigan Medical Service by a large company, a steel company, I believe, to offer this service. We were also enlightened—at least, I was—as to how much the hospitals are in the practice of medicine. Dr. Novy stated that the checks for Michigan Medical Service were made out to the roentgenologist directly. Then it was explained very carefully how the roentgenologist signed the checks over to the hospital and the hospital cashier received the money, indirectly, shall we say, from the Michigan Medical Service. We believe that is a type of hospital practice of medicine.

If a large company, such as this steel company, can put pressure on to get unlimited x-ray service, which is some type of practice of medicine by the hospital, what is to prevent the same company next year from asking for full coverage for obstetrical service, for instance, and the hospital offering an obstetrician who will also sign the checks over to the hospital, which will be the practice of medicine.

We in Genesee County are trying to be constructive and trying to keep the practice of medicine in the doctors' offices. This is just one more way in which the practice of the doctors can be taken away from them.

THE SPEAKER: Is there any other discussion?

J. H. SCHLEMER, M.D. (Wayne): I think we should be very careful with the resolutions that have been presented. It is true that it is illegal for a corporation to practice medicine. We have in this city a very large hospital that is a corporation, and it is practicing medicine. However, I would hate to attempt to go into court to stop them, with the terrific amount of money they have behind them and the terrific array of legal talent that they could hire. What about our University Hospital?

E. D. SPALDING, M.D. (Wayne): And Henry Ford Hospital.

J. H. SCHLEMER, M.D. (Wayne): Well, I have Henry Ford Hospital in mind. I didn't want to mention that hospital specifically, but since it has been brought out, both those hospitals are practicing medicine. Are we going to stop these hospitals from practicing medicine? I would hate to undertake it. So let us be very careful with these resolutions.

C. W. COLWELL, M.D. (Genesee): I have one more comment. Before the Reference Committee this morning—I believe I am correct and I will gladly be corrected if I am wrong—a roentgenologist who spoke in favor of the resolution stated that this profession had been completely sold down the river. I believe Dr. Novy said they had been sold down the river. Still, they are willing to keep going down the same river. Here is a time when we could at least partially put a stop-gap in this thing and not sell any more of us down the river.

J. H. SCHLEMER, M.D. (Wayne): Then let's do it cautiously!

C. K. STROUP, M.D. (Genesee): There is one other point which I think should be emphasized: that some of the policies are issued by the Michigan Medical Service and Michigan Hospital Service before they are ever brought up and discussed before the Society. I feel sure that had the prepayment of one of the policies by the Michigan Medical Service been brought up on the floor we today would not be paying a large per cent of Michigan Medical Service money to this cause. The same thing applies somewhat to this policy; not to that extent, but they are presented to us as matters of fact. We have to save face and go along with the proposal brought up by the service. I think it is very unfortunate that the proposal had to come from Genesee County. I think if some other county had presented it, it would have been received with much more approbation.

THE SPEAKER: I must make a remark in defense of the preparation of policies by a prime corporation, of which you are a part. Such major questions as you will consider this afternoon come before you, not as delegates, but as delegate members of the Michigan Medical Service. The Michigan State Medical Society cannot dictate the insurance policies of a corporation you put on its feet and then gave the go-ahead to, but it will continue to have considerable control by its medical membership on the Board of Directors.

Are you ready for the question?

J. E. LOFSTROM, M.D. (Wayne): Since mention has been made of the remarks of a roentgenologist at the meeting this morning I should say a word, inasmuch as the remarks came from me. I was there; I attended the meeting. I attended also a meeting of a group of radiologists, which comprised representatives on a rather state-wide basis last February when this was presented. At that time it was a package that had already been accepted, been adopted by the Board of Directors, or the governing body of the Michigan Medical Service. We were more or less helpless in that regard. I certainly subscribe to the attitude of the group from Genesee County in presenting this motion of objection. I had planned to bring that up on the floor this afternoon.

The consideration of the group at that time, after having that adequately explained to them—and I feel I speak for a fairly representative group of radiologists in the state—is that we do not want to do anything to sabotage the efforts of the medical profession in expanding the voluntary insurance plan, whether it be strictly hospital or whether it be combined medical service and hospital. It was our feeling that if this were opposed completely and ruled out that the same would hold as far as the present medical and surgical benefits were concerned. They could not be offered as a package to the consumer. We do not feel that we have been placed in any greater jeopardy in this maneuver than the remainder of the profession in accepting medical-surgical plans. The Michigan Medical Service has been very careful to maintain integrity in this insurance plan, that this is a medical benefit. In Ohio, Pennsylvania and other states it is written strictly as a hospital benefit. We unalterably oppose that. Here it is provided as a strictly medical benefit, and it is so written and so expressed in the rider.

Therefore, we agreed and lent our support to the representatives of the Michigan Medical Service in this particular instance.

I certainly wish to commend the men of Genesee County in their opposition to the fact that the Board of Directors of the Michigan Medical Service proceed without adequate representative opinion being offered by effective groups. However, I think that can be taken up subsequently.

I think I speak for the majority of radiologists, certainly in this area, when I say they have accepted and are in favor of this present rider.

THE SPEAKER: Is there any other discussion?

G. T. MCKEAN, M.D. (Wayne): I might try to say a few of the things Dr. Novy said to us. He emphasized that this was a payment direct to the radiologists. The radiologists had a right to do anything they wished with the check. Michigan Hospital Service played a role only in two places. One was that the certificate was sold only along with the Michigan Hospital Certificate. The other, that the Michigan Hospital Service was willing to take some financial responsibility in backing up the program. Michigan Medical Service was taking no orders from Michigan Hospital Service in that matter.

Call for the question. Motion carried.

G. T. MCKEAN, M.D. (Wayne): I move the report of the committee as a whole be approved.

H. H. RIECKER, M.D. (Washtenaw): I second it.

Motion carried.

THE SPEAKER: The Chair declares this meeting recessed until tonight at 8:00 p.m.

The session thereupon adjourned at 12:30 p.m.

TUESDAY EVENING SESSION

September 19, 1950

The House of Delegates reconvened at 8:20 p.m.

THE SPEAKER: It is an unusual honor in having the President of the American Medical Association with us. I will turn the introduction of our speaker over to our President-Elect, Dr. Umphrey. He will assume the chair from here on.

XV—Remarks of E. L. Henderson, M.D., President AMA

PRESIDENT-ELECT C. E. UMPHREY: Tonight it is my pleasure to introduce a man who started out as many of the rest of us started out, on the farm. He is a graduate of the University of Louisville Medical School, 1909. He is a distinguished surgeon. He belongs to

the Kentucky State Medical Association and the Jefferson County Medical Society.

Dr. Henderson has been active in the American Medical Association for many years. He was elected to the House of Delegates policy-making body of the American Medical Association in 1937. Two years later he became a member of the Board of Trustees, and was elected as its chairman in 1947.

Dr. Henderson is Director of the Crippled Children's Hospital and a staff member of the Kentucky Baptist Hospital and St. Joseph's Infirmary. He served as major in World War I; was a lieutenant colonel in the Medical Reserve Corps for many years. In World War II, he was chairman of the Fifth Service Command Committee on Procurement and Assignment Service for physicians and dentists. Since 1942 he has been a special surgical consultant to the Air Surgeon's office. He has been active in world medicine.

Tonight it gives me a great deal of plesure to introduce to you the President of the American Medical Association and President-Elect of the World Medical Organization, Dr. Henderson.

(The members arose and applauded; Dr. Henderson thereupon presented his prepared paper.)

President-Elect Umphrey: Thank you, Dr. Henderson, for the excellent talk. We in Michigan wish to convey to you this message: that the medical men of Michigan not only support the program of the American Medical Association, but if there is any personal service that we can render to you while in office we stand ready to render that service.

I will now turn the chair back to Dr. Baker.

The Speaker: Gentlemen, it is our privilege now to listen to Dr. Henderson off the air. He will make a few remarks to us personally.

E. L. Henderson, M.D.: My remarks are for doctors generally. I might make some remarks here in the presence of doctors that I would not like to make over the radio. For that reason, I reserved some remarks until after I talked on the radio.

The other day, a memorandum came across my desk from one of the leading dentists of the country. He made the remark in a rather critical way that in my talks before groups throughout the country I failed to include the dentists. I do not think we have any dentists here this evening, but when I talk about doctors I include physicians and dentists. The dentists are somewhat sensitive. Sometimes they are critical if you refer to "doctors and dentists." I always try to refer to "physicians and dentists." When I talk of the medical profession I naturally include the dentists. When I talk of our fight against socialized medicine and socialization in general I speak of all of our allied profession, because we need all of our allied profession, and they are grouped with us and should fight right along by our side. The druggists throughout our country as well as the dentists are doing a splendid job; they are co-operating with us 100 per cent in our fight against compulsory health insurance. I say they are fighting and co-operating 100 per cent. I mean in so far as the doctors are concerned. You must remember that we have a certain group of doctors in this country who are not co-operating 100 per cent.

I have here a little pamphlet that I would call to your attention. Probably some of you have seen it, and also this other pamphlet. They look just the same from where you are sitting. They are just the same, except for the frontispiece. For instance, this pamphlet was put out by the Committee for the Nation's Health, known as the National Health Insurance Handbook, "A Practical Guide for Leaders," Committee for the Nation's Health, 1416 F Street, N.W., Washington, D. C.

Here is the same booklet, with the title, "Administration's Health Program," Training Kit for Leaders, Democratic National Committee, 1218 Street, N.W., Washington, D. C. That booklet has been sent out all over the country to Democrat workers, throughout the states and counties and precincts of this country.

Now, gentlemen, I am not a partisan politician. The truth is that I have been registered as a Democrat as long as I have been old enough to vote. The truth also is that I am not a Social Democrat. We certainly have plenty of them in this country. If we are to fight socialism we have got to fight the organizations that are getting out and fighting us. Any other course would be a tragic betrayal, not of our profession but of the American people. I urge all of you to get out and fight for the men who are willing to stand up for the American way of life, for the American principle, not only in medicine but in all stems of American life.

American medicine is stronger today than ever in the history of American medicine. We have more unity in the medical profession today than ever in the history of our profession. That has required a lot of work; it has necessitated overcoming many problems. However, you do not hear today the bickering in the medical profession that you heard a few years ago.

The doctors of this country can control any election if they just get out and work at it. I think the results of the election in Florida and also in North Carolina thoroughly demonstrate that. In Florida a great many people thought it would be impossible for them to defeat Senator Pepper, but he was defeated. The doctors and their wives and their office help and the allied professions, the dentists and their wives and the pharmacists, all of them went in together, and don't forget the Women's Auxiliary. They did a wonderful job down there, and they can do a wonderful job anywhere they are called upon to do a job, if you let them do it. If we just get out and do the job we can control the elections in this country, and that is the only way we are going to be able to defeat socialism in this country.

You cannot do that as a medical organization, as a medical society, but you can do it by organizing committees of doctors in various communities, doctors in the allied professions, such as political action committees made up of physicians and the allied professions. You can get out and really work and accomplish something. In Florida they had a letter-writing campaign. All the doctors who were interested wrote letters to all their patients. The letters were prepared and signed by the doctors in their offices and sent out over their signatures. The women went out from door to door and worked during the campaign. On election day most of the doctors closed up their offices and they and their wives used their cars to get the voters out. Those are the things that must be done if we are to control elections.

As I said before, I am not talking about any party affiliation. There are good men in all the parties, but there are socialistic men in most of the parties. It is our duty not only to preserve the American way of practicing medicine, not only for the freedom of medicine, but for freedom of all Americans. (*Applause*)

The Speaker: Thank you, Dr. Henderson. We appreciate your spending your time to give us these additional remarks.

I now call for any unfinished business.

XIV—g. 1. On Emeritus Membership

D. H. Kaump, M.D. (Wayne): The Special Memberships Committee would like to certify the nomination of F. A. Watts, of Owosso, for Emeritus Membership. I so move.

The motion was severally seconded and carried.

The Speaker: Are there any other supplementary reports of Reference Committees to be considered at this time?

L. T. Henderson, M.D. (Wayne): This is a short resolution. I will read it:

XIV—h. 5. Information to Public on Atomic Disaster

WHEREAS, the Emergency Medical Service Committee, the Committee on Atomic and Allied Procedures

and other committees of the Michigan State Medical Society are working on problems affecting the health and welfare of the people in respect to civilian defense and in connection with the protection of life in the event of an atomic attack; and

WHEREAS, the information developed by these committees can be of maximum service to the people only if it is disseminated to the public in proper fashion; and

WHEREAS, lay publications recently have been devoting extensive space to this problem the medical profession has been planning for the people's medical care protection for the past two years; and

WHEREAS, the Public Relations Committee of the Michigan State Medical Society has the means whereby this information can be broadcast: Therefore be it

RESOLVED, That the Public Relations Committee of the Michigan State Medical Society be instructed to devote a portion of its efforts to the education of the public in respect to matters of health and medical care having to do with the dangers posed by atomic attack.

The committee approves this resolution and moves its adoption.

B. M. Harris, M.D. (Washtenaw): I second it.

Motion carried.

XVI—Election of Officers

We are ready to proceed with the Election of Councilors. There are four Councilors listed in the Handbook, whose terms expire this year. We will first accept nominations for Councilor to the 2nd District.

XVI—a. COUNCILOR 2ND DISTRICT

H. W. Wiley, M.D. (Ingham): I am one of the representatives of the 2nd Councilor District. At a caucus held this noon, it was agreed that I should place in nomination the name of Dr. Robert S. Breakey for Councilor from the 2nd District.

J. D. Van Schoick, M.D. (Jackson): I second it. I am sure most of the men here know Bob Breakey pretty well. I am sure all of us of the 2nd District know him well. We know that he is a man of action, sometimes of a good many words. Nevertheless, Bob is a patriot and a representative of any district he represents. So, on the part of Jackson County, it gives me great pleasure to second the nomination of Bob Breakey for Councilor from the 3rd District.

E. G. Krieg, M.D. (Wayne): I move the nominations be closed and that the Secretary be instructed to cast a unanimous ballot.

The motion was severally seconded and carried.

XVI—b. COUNCILOR 3RD DISTRICT

The Speaker: Nominations are in order for Councilor from the 3rd District.

H. C. Hansen, M.D. (Calhoun): After a caucus of the delegates of the 3rd Councilor District, I am prepared to make a motion to nominate Dr. George W. Slagle as Councilor for the 3rd District. I hope you elect him.

R. A. Springer, M.D. (St. Joseph): I represent the other portion of the 3rd Councilor District. It affords me great pleasure to wholeheartedly second the nomination of Dr. Slagle. He has a splendid personality, a splendid mind. At no time will he be anything but a credit to The Council.

P. E. Sutton, M.D. (Oakland): I move the nominations be closed and the Secretary be instructed to cast a unanimous ballot.

R. A. Springer, M.D. (St. Joseph): I second the motion.

Motion carried.

XVI—c. COUNCILOR 15TH DISTRICT

P. E. Sutton, M.D. (Oakland): The 15th District is comprised of members from Macomb and Oakland. Within the memory of the delegation from Oakland there has never been a Councilor from Macomb. We have canvassed the situation very carefully among our confreres and we believe we have found an excellent man whom we would like to place in nomination for Councilor from the 15th District. I speak of Dr. Bruce Wiley, of Utica, Macomb County. He has been a delegate to this body for ten years. He is a past president of the County Society. He has been a very faithful secretary of Macomb County for ten years. In addition he was state chairman of the National Conference of County Medical Society Officers in 1947. Since 1947, he has been a member of the Executive Committee of the National Conference of County Medical Society Officers. He has been a member of the Michigan State Medical Society Public Relations Committee. He has served the 15th District as CAP chairman. The Oakland delegation are very confident that Dr. Wiley will make an excellent Councilor.

E. D. Spalding, M.D. (Wayne): I am delighted to second the nomination of Dr. D. B. Wiley. Those of us who have been in the House for some time know him well. I am glad to offer a second to the nomination.

The Speaker: The Speaker is very pleased to have the nomination of Dr. Wiley from this Councilor District.

R. L. Novy, M.D. (Wayne): I move that nominations be closed and the Secretary be instructed to cast a unanimous ballot.

The motion was severally seconded and carried.

XVI—d. COUNCILOR FOR 16TH DISTRICT

G. C. Penberthy, M.D. (Wayne): It was with regret that the membership of the Wayne County Medical Society learned from Dr. Osius that he would prefer not to be placed in nomination. It is not necessary for me to tell this House of Delegates what Dr. Osius has contributed as a Councilor from the 16th District. We have seen him in action during this period, at this meeting. We regret to learn that Dr. Osius, due to extenuating circumstances, prefers not to have his name placed in nomination.

It is my privilege and pleasure to bring to you a friend of all of you, Wyman D. Barrett, to succeed Dr. Osius as the Councilor from the 16th District. You all are aware of and know Dr. Barrett's interest in organized medicine. He served on The Council of the Wayne County Medical Society, and is an ex-president of the Wayne County Medical Society. He is a member of the board and chairman of the Board of Trustees. At the present time he is a delegate to the House of Delegates of the American Medical Association, where each year his contributions are recognized.

It gives me great pleasure to place in nomination the name of Dr. Wyman D. Barrett, Councilor of the 16th District.

E. C. Texter, M.D. (Wayne): I would like to second the nomination of Dr. Barrett. It gives me great pleasure to do so.

H. B. Fenech, M.D. (Wayne): I move the nominations be closed and the Secretary be instructed to cast a unanimous ballot.

Motion carried.

XVI—e. DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

K. B. Babcock, M.D. (Wayne): As chairman of the Wayne delegation, it is my privilege and honor to place the name of Dr. Wyman Barrett in renomination.

G. C. Penberthy, M.D. (Wayne): I second it.

D. R. Smith, M.D. (Dickinson-Iron): I wish to nominate as a delegate to the American Medical Association, to succeed himself, having just finished his first

term as a delegate to the AMA, Dr. W. H. Huron, of Iron Mountain.

E. D. Spalding, M.D. (Wayne): I wish to place in nomination for the third position a stranger to all of you, a young man who is promising, none other than Dr. Robert Novy, to succeed himself.

The Speaker: Are there any other nominations?

R. A. Springer, M.D. (St. Joseph): I move the nominations be closed.

H. B. Fenech, M.D. (Wayne): I second the motion.

Motion carried.

The Speaker: The three men nominated are elected as delegates to the American Medical Association. We have no ballots to count, and therefore the winner will be decided by drawing lots. The first one drawn will be the senior, the second one drawn will take his position correspondingly, and the third one will take his position correspondingly.

E. D. Spalding, M.D. (Wayne): May I suggest an alternate method? That these men have their seniority in the House of Representatives determine their order. I will so move.

G. C. Penberthy, M.D. (Wayne): I second it.

The Speaker: You mean seniority in this House of Delegates?

E. D. Spalding, M.D. (Wayne): Seniority in their position as delegates to the American Medical Association.

G. C. Penberthy, M.D. (Wayne): They are now in their sequence.

Motion carried.

The Speaker: Does Dr. Barrett have seniority at the present time?

G. C. Penberthy, M.D. (Wayne): That is right, and then Dr. Huron and then Dr. Novy.

The Speaker: Then their seniority will remain the same.

XVI—f. ALTERNATE DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

The Speaker: Three persons are to be elected.

J. J. Lightbody, M.D. (Wayne): I would like to place in nomination the name of Dr. Ralph A. Johnson as an alternate delegate to the AMA.

W. B. Mitchell, M.D. (Wayne): I would like to place in nomination the name of Dr. R. H. Denham, Grand Rapids, as an alternate delegate to the AMA.

M. A. Darling, M.D. (Wayne): I should like to place in nomination the name of Dr. Clarence I. Owen, to succeed himself as alternate delegate.

J. E. Lofstrom, M.D. (Wayne): I would like to move that the nominations be closed and a unanimous ballot be cast for the nominees.

J. H. Schlemer, M.D. (Wayne): I second it.

Motion carried.

The Vice Speaker: I am trying to find out if Dr. Spalding was out of order on his last motion. The following is an excerpt from the Constitution, relative to alternate delegates:

"The number of alternate delegates shall equal the number of delegates. They shall be elected in exactly the same manner after all delegates have been elected. Alternate delegates shall have relative seniority according to the respective number of votes received by them, and such seniority shall be designated at the time of election. Alternate delegates serving their second year shall hold seniority over those alternate delegates serving their first year in office; provided, however, that reelection as alternate delegate shall carry with it no additional seniority."

The Speaker: Dr. Spalding, I must read another sentence here:

"In case of a tie vote of high candidates the winner, or winners, shall be decided by drawing lots; supervised by the Speaker of the House of Delegates; provided however, that any candidate thus tied shall have the right to a decision by ballot if he requests same."

That is on the delegates.

Secretary Foster: That should be the procedure, rather than Dr. Spalding's motion.

The Speaker: I am afraid we have got to take a little time on the question of seniority. That will be done by drawing lots, unless some of the delegates wish it done by ballots.

J. R. Heidenreich, M.D. (Menominee): I move we suspend the rules and decide seniority by drawing lots.

E. D. Spalding, M.D. (Wayne): You can suspend Robert's Rules of Order, but you cannot suspend the By-laws, even by unanimous vote.

Secretary Foster: It is important that we know who the first alternate is. Each year they move around, move up. The second moves up to first, and so on.

H. F. Dibble, M.D. (Wayne): To overcome the difficulty, why could we not vote for one alternate to take the position of the first alternate this coming year?

The Speaker: May I suggest that that would mean two ballots. You might mark the ballots 1, 2 and 3, in the order in which you want them to have seniority. That would at least make it official.

I will appoint as tellers Dr. Sutton, Dr. Wiley, and Dr. Becker. We will first vote on the three delegates, Dr. Barrett, Dr. Huron and Dr. Novy. Mark your ballots 1, 2 and 3, in accordance with the way you wish them to have seniority.

Before you vote, gentlemen, the Chair wishes to point out that the motion of Dr. Spalding as accepted is not constitutional. We will vote by ballot, as instructed. The ballots are big enough, so I see no reason why you cannot vote for both the delegates and alternates, if that is acceptable to the House. Put the delegates on one side and the alternates on the other side. Be sure to number them.

(The balloting resulted in delegates and alternate delegates having the same seniority as previously.)

XVI—g. PRESIDENT-ELECT

Douglas Donald, M.D. (Wayne): I wish to place in nomination the name of a man who has served the House of Delegates and The Council of the Michigan State Medical Society for a period of many years. I think eleven, to be exact. For five or six years he was vice-chairman of The Council, and for three years has been chairman of The Council. I need not go into his other honors. I wish to say nothing more, except to place in nomination the name of Dr. Otto Beck for President-Elect.

L. G. Christian, M.D. (Ingham): I support the nomination.

R. W. Teed, M.D. (Washtenaw): The delegation of Washtenaw County takes pleasure in unanimously seconding also the nomination of Dr. Beck.

W. B. Mitchell, M.D. (Kent): I would move that the nominations be closed and the Secretary be instructed to cast a unanimous ballot for Dr. Otto O. Beck for President-Elect.

H. F. Dibble, M.D. (Wayne): I second the motion.

Motion carried.

(The members arose and applauded.)

The Speaker: Dr. Beck, I want to shake your hand and congratulate you at this moment. I would like to have made the nomination, and I am very, very proud that you come from my county, and proud of your long years of service.

O. O. Beck, M.D. (Oakland): Thank you, Bob. Mr. Speaker, Members of the House of Delegates: I had hoped at this session to retire from active participation in the affairs of the Society because of personal reasons, not because I have not enjoyed the eleven years I have served on The Council and in various capacities. That period of time has been a joy to me, has been an experience such as only few of us have in a lifetime. It

is an education that comes to only a few to work for that length of time for such a fine organization as this is and for such a fine group of gentlemen. I am deeply humble. I feel a deep void of having the proper qualifications for this office. But I am entirely grateful to you for the confidence you have placed in me, and I want to thank you.

THE SPEAKER: Gentlemen, let us interrupt the proceedings for a moment. I think it is nice to look over the past presidents. I am sure there are several of them in the House. I wish they would come to the front of the room so they can at least be seen. We are very glad to have you all with us. We certainly appreciate your past services. We anticipate as good or better from you, Dr. Otto, in your office when you take over as President.

XVI—h. SPEAKER OF THE HOUSE OF DELEGATES

R. S. BREAKEY, M.D. (Ingham): This is probably the last time that I shall bother the House of Delegates. I should like to place in nomination the name of our present Speaker. I could spend some time in eulogizing. We have had Speakers in this chair for as long as periods of seven years. If we accepted Bob for seven years more we would be doing ourselves credit.

(W. E. Barstow, M.D., President, assumed the chair.)

J. M. MARKLEY, M.D. (Oakland): Oakland County takes great pleasure in seconding the nomination of Dr. Baker for Speaker of the House of Delegates.

R. W. TEED, M.D. (Wastenaw): I move that the nominations be closed and the Secretary be instructed to cast the unanimous ballot for Dr. Baker.

H. F. DIBBLE, M.D. (Wayne): I second the motion.

Motion carried.

VICE SPEAKER J. E. LIVESAY: Bob, it has been a pleasure working with you this year. Congratulations!

THE SPEAKER: Thank you very much, gentlemen of the House of Delegates. And thank you, Dr. Spalding. We almost sat you down tonight, with the help of the Vice Speaker who did a very nice job at my elbow. I have enjoyed this, in spite of various nervous moments during this session. You have been very kind. You have helped me out of one of my great weaknesses, not being able to call out your name when you get up on the floor. Now that you have tolerated me for one year I probably can learn something, after the lesson Ed Spalding gave me last night.

XVI—i. VICE SPEAKER OF THE HOUSE OF DELEGATES

E. D. SPALDING, M.D. (Wayne): We have had two new men presiding over this House of Delegates meeting this time. They have done an extraordinarily good job, with all the heckling they have had from the sidelines. I think the best way of showing our appreciation is to return these men to office.

It gives me great pleasure to place in nomination for Vice Speaker the name of Dr. J. E. Livesay, of Genesee County.

F. A. WEISER, M.D. (Wayne): I would like to second that.

R. A. SPRINGER, M.D. (St. Joseph): I move the nominations be closed and the Secretary be instructed to cast a unanimous ballot.

G. C. PENBERTHY, M.D. (Wayne): I second it.

Motion carried.

THE VICE SPEAKER: Thank you for your vote of confidence, gentlemen.

THE SPEAKER: Thank you very much, gentlemen. We certainly appreciate all you have done.

I declare the 85th Annual Session of the House of Delegates of the Michigan State Medical Society now adjourned.

XVII—Adjournment

The House of Delegates adjourned at 9:30 p.m.

NEW INFLUENZA VIRUS DISCOVERED

(Continued from Page 1445)

from a group of children, ages one to five and one-half years, in the studies. Tests of serums obtained from patients among the students at the University of Michigan ill with influenza during the epidemic phases of 1947 and 1950 showed little reaction to the new virus, indicating the possibility that adults might not show a measurable response to infection with this virus. Attention was then turned to young children who would be less experienced and whose antibody responses would be more likely to reflect the occurrence of infections.

Blood samples tested in 1947 from children who had been vaccinated with the PR8 strain of Type A influenza in the fall of 1946 showed a rise in antibodies to the virus, indicating that there had been a wide exposure to this virus.

Tests of serums from another group of children, taken in 1947, showed rises in antibodies to both the A-prime, a sub-type of A group influenza, and the new virus. This gave evidence that the two diseases were concurrent in the population and of about the same incidence during the spring of 1947, and that they are immunologically independent.

A high incidence of antibodies in adults tested strongly indicated that the population has been thoroughly seeded with the new virus strain. Research also showed that the virus has been circulating since at least 1936.

Symptoms in adults are not yet well outlined, but fever, cough and the ordinary head cold were the common signs in children.

"The association of the epidemic disease with influenza, the basic clinical picture, and the wide distribution of antibodies in the human population, as well as the serological and immunological characteristics of the virus readily invite consideration of the name, Influenza C," the paper concludes. "Further studies, a number of which are under way, will determine the appropriateness of this suggestion."

MSMS

Cytologic examination of sputum is of great diagnostic value in the case of patients suspected of bronchogenic cancer when bronchoscopic examination is contraindicated.

* * *

Cancer of the lung must be differentiated from pulmonary abscess, pneumonia, benign tumor, and tuberculosis.

POSTGRADUATE CONTINUATION COURSES

Wayne University College of Medicine

December 4, 1950-March 10, 1951

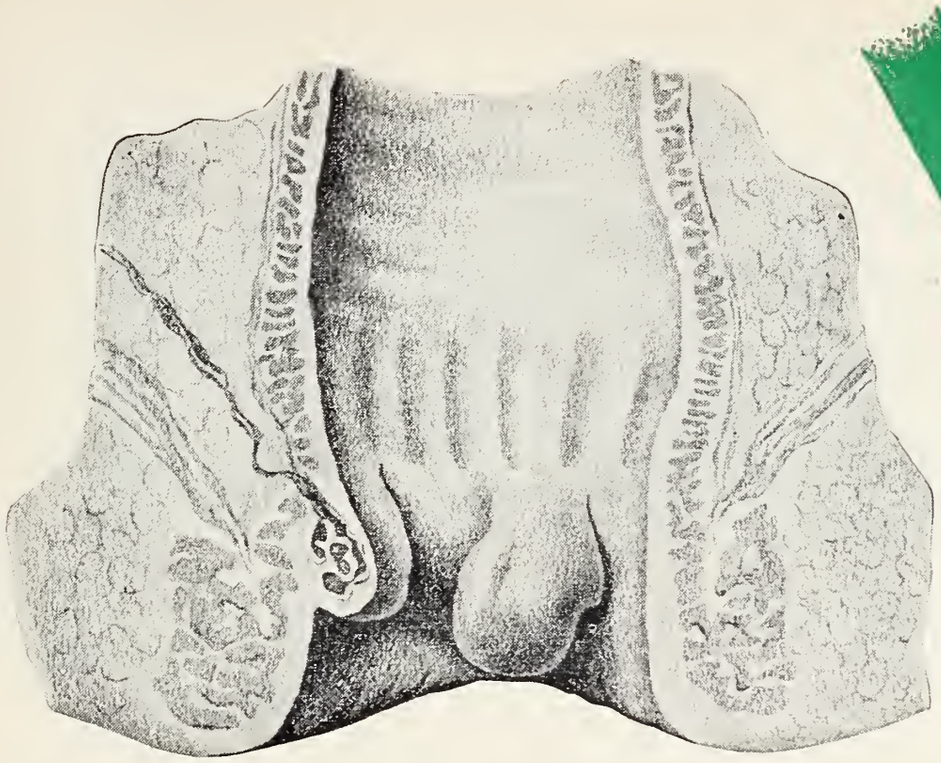
These courses are open to all qualified persons.

Veterans who are not Residents in a Detroit hospital and who have Certificates of Eligibility under the GI Bill, should make arrangements for tuition and books, as provided by the GI Bill, by presenting these Certificates of Eligibility to Dr. Arthur Johnson, Veterans Administrator at Wayne University, 5115 Second Avenue, Detroit, Michigan.

If you do not possess a Certificate of Eligibility, please call Dr. Johnson at Temple 1-1450, Veterans Affairs, before going to his office, and he will inform you what papers it is necessary to bring with you. *This must be completed before you register.*

Registration for these courses can be made in the office of Postgraduate Medical Education at the College of Medicine, 1512 St. Antoine.

Title of Course	*Place*	*Time*	*Fee*
	Anatomy		
Surgical Anatomy (Two Quarters) (Limited to 20 Senior Surgical Residents)	College of Medicine	Tuesday 3:00-5:00	$35.00
	Physiological Chemistry		
Seminar in P. Chemistry	College of Medicine	Thursday 3:30-4:30	$15.00
Intermediary Metabolism	College of Medicine	Friday 1:00-2:00	$15.00
	Pathology		
Gynecologic Pathology (Every doctor must have microscope)	College of Medicine	Wednesday 1:00-5:00	$50.00
Path. of Parasitic Diseases	College of Medicine	Monday 1:00-5:00	$50.00
Neuropathology	College of Medicine	Friday 1:00-5:00	$50.00
Advanced Hematology (Limit 5)	College of Medicine	Monday 1:00-5:00	$50.00
	Dermatology		
Seminar in Dermatology	Receiving Hospital	Wednesday 10:00-11:30	$15.00
Dermopathology Seminar	College of Medicine	Tuesday 11:00-12:00	$15.00
Conf. on Venereal Diseases	Social Hygiene Clinic	Thursday 1:00-2:30	$15.00
	Internal Medicine		
Medical Conference	Receiving Hospital	Wednesday 5:00-6:00	$15.00
Gastroenterology	Receiving Hospital	Saturday 8:00-9:00 a.m.	$15.00
Medical Seminar	Receiving Hospital	Thursday 6:30-7:30	$15.00
Medical X-Ray Conference	Receiving Hospital	Tuesday 11:00-12:00	$15.00
Allergy Clinic & Conference	Receiving Hospital	Tuesday 8:00-11:00 a.m.	$25.00
	Surgery		
Surgery Seminar	College of Medicine	Monday 4:00-5:00	$15.00



Bowel Regulation in Hemorrhoidal Conditions

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3. Handstamped, using a stamp well-inked with black ink. Light or smudged copy will not reproduce well.

The reproduced copies will be mailed in window envelopes. Illegible or incomplete addresses will seriously delay receipt of the reports in the doctors' offices.

The co-operation of physicians in preparation of reproducable originals is requested.

* * *

Food samples suspected of being the source of illness which are submitted to the Division of Laboratories, Michigan Department of Health, for examination must be accompanied by a statement in sufficient detail to incriminate the food epidemiologically. This statement must be signed by the local health officer.

* * *

Calibration and preliminary test runs on a new automatic recording x-ray spectrometer have been completed by the Division of Industrial Health, Michigan Department of Health. The new equipment will facilitate the determination of silica and dust found in the foundry, mining, pouring, cleaning and cutting industries in the state. Its fast and accurate analysis of silica-bearing dusts will aid in the detection and correction of conditions which cause silicosis in Michigan.

* * *

One out of every 109 people who had their chests x-rayed at Michigan's 1950 fairs has suspected tuberculosis.

Mobile tuberculosis case-finding units of the Michigan Department of Health, operating at thirty-one fairs and festivals this summer and fall, x-rayed the chests of 56,658 persons and found 1,087 chest abnormalities, including 519 cases of suspected tuberculosis which otherwise might have gone undetected.

Where the small x-ray film indicated a chest abnormality, the individual was advised, by mail, to see his physician for a complete examination and any needed treatment. About half of the abnormalities found on the x-rays appeared to be due to conditions other than tuberculosis—heart disease, pneumonia, silicosis and tumors or cancers.

* * *

To assist in determining the cause of death of many research animals on the National Foundation for Infantile Paralysis monkey farm, L. P. Hedeman, D.V.M., and Serge Lensen, Ph.D., of the Division of Laboratories, were called to Savannah, Georgia, in November.

* * *

Ultraviolet irradiation equipment for the destruction of infectious hepatitis virus in human blood and plasma, largely designed and developed in the laboratories of the Michigan Department of Health, was displayed by the Department before the American Association of Blood Banks Convention in Chicago. The Michigan-designed equipment is now being used by the National Institute of Health, the Army, the Navy, and major hospitals, health departments, blood banks and drug manufacturers throughout the world.

* * *

The Michigan Department of Health, which continually advises regular physical examinations for protection against diabetes and its complications, took a leaf from its own notebook and made arrangements for urinalysis of each of its employes who desired the examination during National Diabetes Detection Week.

* * *

E. J. MacLachlan, D.V.M., who had served as director of the Jackson City Health Department since 1935, retired September 15, 1950, after thirty years of service with the Department. Dr. MacLachlan served as dairy and food inspector with the Jackson Department from 1920 until his appointment as director on October 16, 1935.

F. I. VanWagnen, M.D., was named acting director of the Jackson City Health Department to serve until a full-time director is appointed.

* * *

Approximately forty Michigan people die of accidental carbon monoxide poisoning each year.

* * *

Edward Dunbar Rich Service awards for twenty-five years of service in providing safe public water supplies were given to seventy-nine municipal water works employes from twenty-three Michigan cities in 1950.

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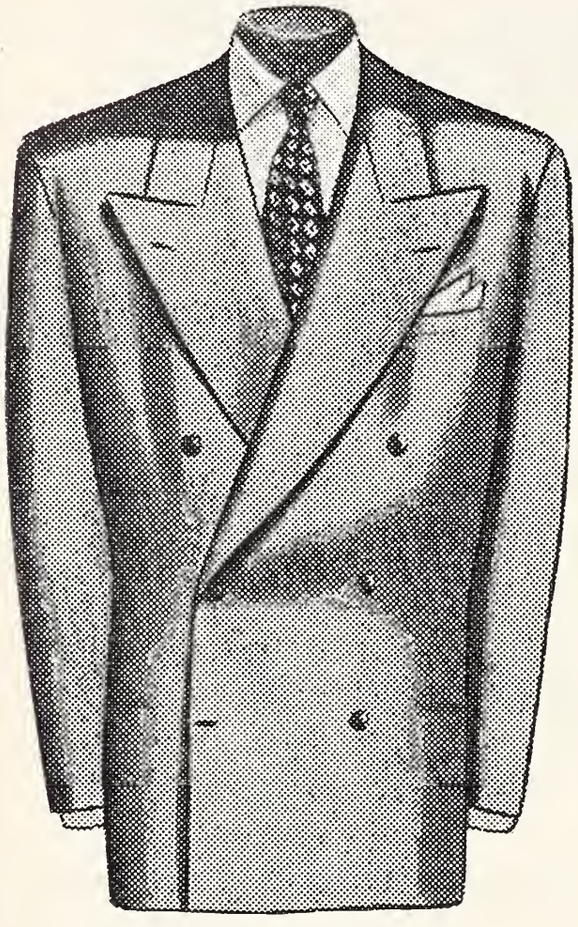

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Communications

October 30, 1950

Dr. Wilfrid Haughey, Editor
610 Post Building
Battle Creek, Michigan

Dear Dr. Haughey:

I have read with a great deal of interest the various articles appearing in the October issue of the MICHIGAN STATE MEDICAL JOURNAL.

These are not only of interest to me as an individual but by virtue of the fact that I happen to be president of the local cancer society. I might say that I am rather proud of the contribution made by various Kalamazoo doctors to this particular issue.

I wish to congratulate you upon the selection of the articles as it appears to be a very excellent job.

Yours very truly,

WADE VAN VALKENBURG
House of Representatives
Lansing, Michigan

* * *

November 1, 1950

Dear Doctor:

We enclose a resolution passed at a meeting of a committee of the International and Fourth American Congress on Obstetrics and Gynecology held in May, 1950, in New York City. We venture to hope that you will bring this before your society, and will try to persuade your society to adopt such an international classification for the better understanding of the statistics published in the various countries, and to make it possible to compare such statistics.

Sincerely yours,

FRED L. ADAIR, M.D.
For The International Congress
on Obstetrics and Gynecology

Resolution Adopted on Classifications of Cervical Cancer

Whereas the so-called League of Nations' Classification of Carcinoma of the Uterine Cervix is now in common use in many countries, but is not used exclusively in the United States of America, it is desirable that this classification, or an acceptable modification thereof, be adopted universally in order to reach a common ground of understanding. Therefore, a committee of duly appointed representatives of the Section of Obstetrics and Gynecology of the American Medical Association, the American Association of Obstetricians, Gynecologists, and Abdominal Surgeons, and the American Gynecological Society, meeting in session with the *Editorial Committee of the Annual Report on the Results of Radiotherapy in Carcinoma of the Uterine Cervix* on the occasion of the International and Fourth American Congress on Obstetrics and Gynecology at New York City on May 14-19, 1950, has agreed to propose the following modification of the classification adopted by the Health Organization of the League of Nations in 1937:

Stage O

Carcinoma *in situ*—also known as preinvasive car-

cinoma, intra-epithelial carcinoma and similar conditions.

Stage I

The carcinoma is strictly confined to the cervix.

Stage II

The carcinoma extends beyond the cervix, but has not reached the pelvic wall. The carcinoma involves the vagina, but not the lower third.

Stage III

The carcinoma has reached the pelvic wall. (On rectal examination no "cancer-free" space is found between the tumor and the pelvic wall.)
The carcinoma involves the lower third of the vagina.

Stage IV

The carcinoma involves the bladder or the rectum, or both, or has extended beyond the limits previously described.

Be it resolved that this Classification be termed the International Classification of the Stages of Carcinoma of the Uterine Cervix, and that all organizations concerned with the problem on hand be approached to consider its adoption.

Committee

(Section of Obstetrics and Gynecology, American Medical Association)
Roy Calkins, M.D.
Walter Dannreuther, M.D.
William Mengert, M.D.

(American Gynecological Society)
Herbert Schmitz, M.D.
Ludwig Emge, M.D.
William P. Healy, M.D.

(American Association of Obstetricians, Gynecologists, and Abdominal Surgeons)
Bayard Carter, M.D.
Robert Faulkner, M.D.
James Corscaden, M.D.

(Editorial Committee, Annual Report of Results of Radiotherapy in Carcinoma of the Uterine Cervix)
James Heyman, M.D.
Malcolm Donaldson, M.D.
Joe V. Meigs, M.D.

SYSTOLIC MURMURS

(Continued from Page 1440)

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. . . . . NEWS MEDICAL

Income Tax.—The Internal Revenue Bureau has ruled that the amount which employers pay toward employes' hospital and medical insurance on group basis is actually an increase in wages and tax must be made upon this. An appeal has been through Blue Cross and Blue Shield to get this clarified. Medical and hospital expenses identified with workman's compensation are recognized as tax exempt. It may be necessary to amend the law.

* * *

Ewing Denies Allegation.—Your correspondent last week brought to attention of Federal Security Administrator Oscar R. Ewing a charge by Dr. L. Fernald Foster, secretary of Michigan State Medical Society, that "$75 million of your tax money (was) admittedly spent by Mr. Oscar Ewing to convert you to the belief that compulsory health insurance is a necessity." Via his secretary, the Administrator issued a denial of Dr. Foster's allegations (contained in a pre-election radio talk) but demurred at discussing the question with your correspondent.—WRMS, November 13, 1950.

Editor's note: The Harness report is one authority for Dr. Foster's figures. Several other congressional reports give the same information.

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Howard H. Cummings, M.D., Chairman
Department of Postgraduate Medicine
2040 University Hospital
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Pharmacists Feud with FDA over Prescription Refills.—November issue of *Journal of American Pharmaceutical Association* (Practical Pharmacy Edition) carried an acidulous editorial, entitled "Confusion," deploring position of Food and Drug Administration in holding that physicians' prescriptions are not refillable. FDA's stand is intended to prevent habitual use of barbiturates and other dangerous drugs. Editorial complains that FDA refuses to publish an official ruling on the subject and won't hold public hearings to iron out differences.

"Neither pharmacy nor medicine exist as professions by the grace of the Food and Drug Administration," it says. "They were the trusted servants of the people in health matters long before there was any Federal Food, Drug and Cosmetic Act. By their codes of ethics and by fostering necessary state laws, they have given ample proof of their interest in safeguarding public health."—WRMS, November 13, 1950.

* * *

570 "Loanouts" on Duty.—All 570 naval medical Reserves ordered to active duty, for assignment to Army stations on temporary loan, have now completed their indoctrination courses at Fort Sam Houston, Texas, and been sent to military hospitals and posts in United States and overseas. Execution of the task of calling them into uniform—many of them on as little as two weeks' notice—and conditioning them to serve with a different military branch from the one they originally elected demanded utmost consideration. That the joint efforts of Army and Navy were successful is attested by numerous letters received last week by Brig. Gen. Paul Robinson, chief of Army medical personnel, expressing thanks for care which was exercised in making duty assignments as well as for courtesies and privileges that were extended to these former V-12's while they were undergoing indoctrination at an Army base.—WRMS, November 13, 1950.

* * *

The Oregon Case.—The Department of Justice has indicated that it will appeal to the Supreme Court Judge Claude McCalloch's decision in the case of the United States against Oregon State Medical Society, Oregon Physicians Committee, eight medical societies and eight doctors, in which Judge McCalloch's decision that the government had not proved its charge of conspiracy.

If this case is not appealed, the government's contemplated cases against societies and medical service organizations will be very much weakened.

Judge McCalloch's decision is far reaching and specific.

* * *

Michigan Authors.—

Clifford C. Benson, M.D., and **Harvey R. Sharpe, Jr., M.D.,** of Detroit, published an article, "Recent Ex-

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periences with Intestinal Resection in Infants and Children," in the AMA *Archives of Surgery,* November, 1950.

H. T. Langston, M.D.; W. M. Tuttle, M.D., and **T. B. Patton, M.D.,** of Detroit, published an article, "Esophageal Duplications," in the AMA *Archives of Surgery,* November, 1950.

Sidney Friedlaender, M.D., and **Alex S. Friedlaender, M.D.,** Detroit, published an article on "The Effect of Pituitary Adrenocorticotropic Hormone (ACTH) on Histamine Intoxication and Anaphylaxis in the Guinea Pig" in the **Journal of Allergy,** July, 1950.

* * *

"**In 1916, Lenin advised** Swiss workers that direct federal taxation would be an instrument through which Switzerland could be socialized. The same for the United States!"—**The Foundation for Economic Education, Inc.,** New York.

* * *

VA Hospital Committee Recommends Changes.—A special committee appointed in June to investigate VA's hospital program has made its report to President Truman. (Dr. Howard A. Rusk, chairman; Dr. Arthur S. Abramson, Rear Adm. Robert L. Dennison.) The report praises VA medical care in general and singles out paraplegic centers and amputee programs for special commendation. Highlights of the report: Challenges Congress to make new interpretation of politically hot policy covering care of non-service connected cases, which VA says take up at least two-thirds of its hospital beds. Declares that VA cannot hope to provide present high-quality staffing for 131,504 beds now authorized, and suggests 120,000 as a safe maximum; this is a rebuke to Congress for authorizing additional construction in opposition to the President. Advised the Armed Forces to transfer to VA all patients not expected to be returned to duty; VA would provide specialized rehabilitation treatment; men to remain on military status and be discharged only on attaining maximum improvement. Urged that non-service connected amputees and paraplegics be given sixty days of home service care (not now allowed for any non-service cases) and that a special job-placement service be set up for paraplegics. Armed Services advised, as long-term policy, not to carry VA medical employes on their reserve rolls; as short-term expedient, not to call up such present reserves. Report to the President from the Committee on Veterans' Medical Services is for sale by Superintendent of Documents, Government Printing Office, Washington 25, D. C., for 25 cents.

September reports on VA show 68,453 non-service connected cases were hospitalized and 35,236 service-connected cases.

* * *

Medical Books for Europe.—**CARE** (20 N. Broad St., New York).—Nearly one million dollars in contributions and pledges have been received to provide the books on scientific equipment for educational institutions overseas, and 378 institutions in twenty-four countries have benefited. Over fifty thousand books and periodicals were sent. Contributions of any amount are accepted.

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Michigan Pathological Society.—The fall meeting of the Michigan Pathological Society was held in Detroit on September 22, in conjunction with the annual meeting of the Michigan State Medical Society. The scientific portion of the meeting was devoted to a seminar on "The Pathology of the Pituitary, Parathyroid, Islet Tissue of the Pancreas, and of the Adrenals." Over twenty cases were presented, and Dr. John R. McDonald of the Mayo Clinic acted as moderator. A demonstration on disaster blood procurement was also conducted during the three-day session of the State Medical Society which included drawing of blood and a standardized method of typing.

* * *

Hospital Standardization.—At their meeting October 21, 1950, in the Hotel Statler, Boston, the Regents of the American College of Surgeons voted unanimously to continue the Hospital Standardization Program of the College.

A spokesman for the Regents stated that this action does not necessarily preclude consideration of proposals for the participation of other interested agencies in this program, but does make it clear that the American College of Surgeons has an undiminished interest in it and will consider no proposal which will not insure its continuation in the best interests of the public.

* * *

Dr. Hartman A. Lichtwardt, director of Women's Hospital, Detroit, spoke before the Detroit Accident and Health Association's October breakfast meeting, and had some vital points on the subject of compulsory socialized medicine. Dr. Lichtwardt noted that a new Government hospital in Minot, S. D., cost $38,000 per bed to build. The same hospital facilities could be built in Detroit today—at Detroit's high prices—for less than $18,000 per bed! He noted, too, that when he visited this great edifice, there was but one patient—costing taxpayers $1,900 a day. He pointed out that the stay in Government hospitals is just twice as long as it is in private and public hospitals.

* * *

AMA Replies to Ewing's New York Talk.—Federal Security Administrator Ewing struck an all-time low in political speech-making when he injected the racial issue in his attacks upon the American Medical Association.

In a speech before the American Jewish Congress, Mr. Ewing as usual upbraided the AMA for many "deficiencies," and then accused medical schools of practicing discrimination against Jews. While he did not lay this discrimination on the AMA's doorstep directly, the strong implication was there just the same. Newspapers published his statements. Within twenty-four hours the AMA countered with a news release which was given good prominence in most of the big papers. The AMA release said:

"The American Medical Association, in a blistering indictment of Federal Security Administrator Oscar Ewing which stated that he had twice been given a vote of 'no confidence' in Congress, to-day (September 29) characterized him as a 'disappointed, embittered bureaucrat,

who should be removed from office before he does further harm to the country.' "

Dr. George F. Lull, Chicago, general manager of the AMA, who issued the statement, declared:

"Mr. Ewing, in his speech yesterday (September 28) before the American Jewish Congress, descended to the depths of political demagoguery when he falsely implied that the American Medical Association was practicing discrimination against Jews.

"He has long been a fomenter of class hatreds and he is now attempting to incite religious and racial hatreds in the manner of Hitler's Germany.

"Mr. Ewing is a case of arrested political development and his irrational statements undoubtedly are a consequence of thwarted ambitions and a growing persecution complex. He is wholly unfit for public office.

"The two Houses of Congress, in successive years, have given Mr. Ewing a decisive vote of 'no confidence,' by rejecting his attempts to gain Cabinet stature and control over the medical profession through the creation of a Department of Health, Education and Security.

"President Truman should finish the job and dismiss Mr. Ewing from the public service before he does further harm to the country."

* * *

Senate's Study of Manpower.—The Armed Services Committee of the Senate has been collecting facts on national manpower, particularly with reference to military potential. The objective is to examine into the working of the Selective Service law, including the doctor draft.

Although traditionally this committee's primary concern is with our armed forces, its members recognize the fact that a convenient separation of military and civil aspects is impossible. They want to find out the proper ratio of physicians to population which is being done at a "target center." They are fully indoctrinated with the Army's goal of 6.5 medical officers per 1,000 troops and 2 dental officers per 1,000 troops. The committee promises to investigate these ratios.

The heavy registration of young draft-vulnerable physicians and dentists throws this problem of manpower allocation into sharp relief. Doctors are being commissioned without regard to their value and essentiality in present civil pursuits. National Security Resources Board's health advisory committee presumably is studying that question but, in the meantime, hospitals are wondering how far their residency losses will be allowed to go and local communities are wondering whether there is anything to prevent surrender of a village's sole practitioner to Army or Navy.

* * *

Training Courses in Radiological Health.—The School of Public Health of the University of Michigan at Ann Arbor conducts what they call Inservice Training Courses in timely subjects. Announced for February 5 to 8, 1951, is a noncredit training course in "Radiological Health." Lectures and courses start a 9:00 a.m., Monday, February 5 and continue, including films on atomic

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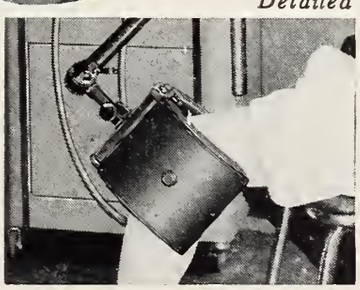

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energy, to 5:00 o'clock; Tuesday and Wednesday from 8:30 until 5:00. Thursday closes with a discussion on "Public Health Aspects of Civilian Defense from Atomic Weapons" by James P. Cooney, Brigadier General, Division of Military Application, U. S. Atomic Energy Commission, Washington, D. C. Any one interested in this course may obtain a complete program by writing, H. E. Miller, M.D., School of Public Health Building, Ann Arbor, Michigan.

* * *

Health Insurance Fight Still in "Congressional Record."—The October 20 issue of the *Congressional Record* carries on a debate over "socialized medicine." Rep. Henry J. Latham (R., N. Y.) brands Federal Security Agency "propaganda machine" for national health insurance as "a law unto itself." Senator Harry F. Byrd (D., Va.) inserts, on October 9, an address by Dr. W. C. Caudill, president of Virginia Medical Society, who warns that the future is lost "if we permit the heady wine of socialism to dull our sensibilities and destroy our initiative." A few pages beyond, Rep. Andrew J. Biemiller (D., Wis.) berates AMA anew and appends complete text of *Atlantic Monthly* article by Dr. James Howard Means, entitled "The Doctors' Lobby."

Another provocative topic in the October 20 *Record* is interspersal of civil and military physicians and dentists at all armed forces' posts and stations within continental limits of U.S. for purpose of utilizing medical manpower to the full. Professional services to military personnel should be in charge of county medical societies or other local medical groups. "There seems to be no justifiable reason why every military base within the U.S., and even some of the foreign bases, cannot be efficiently staffed and operated by civilian physicians and by inducted physicians disqualified for combat duty," says the scheme's author, Dr. D. W. Kingsley, of Hastings, Neb. Congressional sponsor of the plan is Senator Hugh Butler (R., Neb.).

* * *

American Academy of Neurology Announces Official Publication.—As a reflection of the proved recognition of neurology as an integral and essential part of medicine, the American Academy of Neurology announces the establishment of its new publication, *Neurology,* the first issue of which will be mailed January, 1951.

Neurology, the only American journal devoted exclusively to neurology, will be published bimonthly. Its editorial scope will embrace every aspect of clinical neurology including diseases of the nervous system, neuropathology, neurosurgery, neuroanatomy, neurophysiology and neuropsychiatry. The editor-in-chief is Russell N. DeJong, M.D., professor and chairman of the Department of Neurology, University of Michigan.

The establishment of *Neurology* will mark a significant advance in the progress of American medicine, dedicated as it is to fostering a greater knowledge and understanding of nervous diseases. The journal will constitute an authoritative medium of information and discussion for both the specialist and the general practitioner. With interest in neuroses and their action on the physical make-up of the human being increasing more and more

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each year, the importance of the subject of neurology to every practicing physician is becoming increasingly evident.

Neurology will be the one journal to survey and bulletin the changing aspect of neurology. It will touch the sensitive spots of clinical procedure and discovery by publishing original papers on the results of practice and research. Address Lancet Publication, Inc., Minneapolis, Minnesota.

* * *

State Health Officers Oppose Socialized Medicine.—Meeting in Washington, the Association of State and Territorial Health Officers reaffirmed its opposition to national compulsory health insurance and renewed its demand for creation of a federal department of health with cabinet status" . . . and under direction of a career physician in public health."

National health insurance is unnecessary, the resolution says, because voluntary health and hospitalization plans are "rapidly and progressively developing to meet the apparent needs of the people."

* * *

Jackson County Clinic Day—The program of the Jackson Clinic to be held February 8, 1951, at Hotel Hayes, Jackson, Michigan, is as follows:

1. "The Place of Allergy in the Practice of Medicine"—Jonathan Forman, M.D., Columbus, Ohio
2. "Carcinoma of the Colon"—Leland S. McKittrick, M.D., Brookline, Mass.
3. "Gynecological Physiology"—Somers Sturgis, M.D., Boston, Mass.
4. "Treatment of Superficial Lesions of the Skin"—U. V. Portmann, M.D., Cleveland, Ohio

The program will begin at 2:00 p.m., followed by a reception and dinner, at which Dr. Forman will be guest speaker.

The committee in charge is composed of N. D. Munroe, M.D., chairman, A. M. Shaeffer, M.D., W. E. McGarvey, M.D., D. F. Kudner, M.D., and H. W. Porter, M.D

* * *

The American Board of Ophthalmology announces its written Qualifying Tests for 1951: practical examinations will be given in San Francisco, March 11-16; in New York, May 31-June 5; and Chicago, October 8-13.

For detailed information, write Secretary-Treasurer Edwin B. Dunphy, M.D., 56 Ivie Rd., Cape Cottage, Maine.

* * *

The American College of Surgeons announces that one of its sectional meetings will be held in Detroit May 10-11, 1951. For program, write American College of Surgeons, 40 E. Erie St., Chicago 11, Illinois.

* * *

The Fifth American Congress on Obstetrics and Gynecology, sponsored by the American Committee on Maternal Welfare, Inc., will be held in Cincinnati from March 31 to April 4, 1952, at the Netherland Plaza Hotel.

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Ingham County (Lansing) Clinic Day, May 3, 1951

The annual May Clinic of the Ingham County Medical Society will be held Thursday, May 3, 1951 at the Hotel Olds, Lansing. The program is as follows:

Afternoon Session 2:00 P.M.

1. "Re-evaluation of the Indications for Hysterectomy." Ralph A. Reis, M.D., Associate Professor of Obstetrics and Gynecology, Northwestern University, Chicago, Illinois.
2. "Recent Developments in the Diagnosis and Management of the Diarrheal Diseases." Joseph S. D'Antoni, M.D., Clinical Professor of Tropical Medicine, Tulane University, New Orleans, Louisiana.
3. "Recent Advances in Vascular Surgery and Diagnosis in Vascular Disease." Harris B. Shumaker, Jr., M.D., Professor of Surgery, University of Indiana, Indianapolis, Indiana.
4. Round Table. Moderator: I. Snapper, M.D., Director of Medical Education, Mount Sinai Hospital, New York, New York.

5:00 p.m. Social Hour.

6:30 p.m. Subscription Dinner. Speaker: I. Snapper, M.D., Director of Medical Education, Mount Sinai Hospital, New York, New York.
Subject: Liver Function Tests.

All members of the Michigan State Medical Society are invited to attend. No registration fee.

Woman's Auxiliary to the Michigan State Medical Society: Officers for 1950-51 are—President: Mrs. Oscar D. Stryker, St. Clair Shores; President-Elect: Mrs. Robert S. Breakey, Lansing; First Vice President: Mrs. Wm. Mackersie, Detroit; Second Vice President: Mrs. Walter Stinson, Bay City; Recording Secretary: Mrs. Martin Bruton, Saginaw; Corresponding Secretary: Mrs. R. M. Leitch, Union City; and Honorary President: Mrs. Guy Kiefer, East Lansing.

* * *

Doctors' Income Letters.—The third series of letters requesting physicians to fill in and return their income survey questionnaires has been sent out.

These letters come from the Commerce Department and are going only to those who did not return the coded questionnaire received during the summer.

The American Medical Association and the Department of Commerce expect this last appeal will bring the total returns to about 50 per cent.

* * *

The Chicago Medical Society's Annual Clinical Conference will be held at the Palmer House, March 6 to 9, 1951.

* * *

Salt water taken by mouth, in the vast majority of cases, is as effective as blood plasma in the emergency treatment of shock from serious burns and other injuries, according to the report of a group of leading

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American surgeons to the Public Health Service. A member of the study group was F. A. Coller, M.D., Ann Arbor.

* * *

Grants to aid mental health training for psychiatrists, et al, recently announced by the Public Health Service, Federal Security Agency, totalling $1,915,708, included $46,866 to the University of Michigan and $12,500 to Wayne University College of Medicine, Detroit.

Heart teaching grants totalling $735,854 were made by the Public Health Service, Federal Security Agency, with the University of Michigan School of Public Health receiving $12,000 and Wayne University, Detroit, receiving $14,000, annually, over a two-year period.

Research in diabetes was authorized by the Public Health Service, Federal Security Agency, in total grants amounting to $855,740, with the following grants in Michigan: Alvin Zander, M.D., University of Michigan, $32,616; Joseph W. Eaton, M.D., Wayne University, Detroit, $19,364.

* * *

About one million hospital beds exist in the United States, according to Dr. John Cronin, Director of the Federal Hospital Construction Program. "An analysis of the country's needs, reflected in state planning, indicates 900,000 more beds are required just to meet the country's normal peacetime needs" stated Dr. Cronin.

* * *

The Michigan Proctologic Society will hold a meeting on Wednesday, March 14, during the 1951 Michigan Postgraduate Clinical Institute, Book-Cadillac Hotel, Detroit. Pre-prandial at 6:30 p.m. followed by dinner at 7:00 p.m. For program and information write E. F. Sladek, M.D., President, Traverse City, Michigan, or J. W. Becker, M.D., Secretary, 952 Maccabees Building, Detroit.

* * *

Jack Pickering, ace science writer of the **Detroit Times,** was guest speaker at the Bay County Medical Society's annual meeting, December 20, in Bay City.

* * *

The American College of Surgeons elected Alton Ochsner, M.D., of New Orleans as President-Elect, during its Boston meeting on October 26, 1950. He will succeed the present President, Henry W. Cave, M.D., of New York City. Other officers selected were Thomas H. Lanman, M.D., Boston, as First Vice President, and Joel W. Baker, M.D., Seattle, Second Vice President. Among the Board of Regents, four Michigan men were elected: George J. Curry, M.D., Flint, Charles S. Kennedy, M.D., Detroit, James W Logie, M.D., Grand Rapids, and Grover C. Penberthy, M.D., Detroit.

A testimonial of appreciation was presented to retiring President Fred H. Coller, M.D., of Ann Arbor.

* * *

The March of Dimes—Every American has a stake in the 1951 March of Dimes January 15 through 31. Upon the individual contributions received depends the future of the fight against infantile paralysis.

Each dime and dollar given to this fund-raising drive of the National Foundation for Infantile Paralysis is urgently needed this year—to provide assurance of ade-

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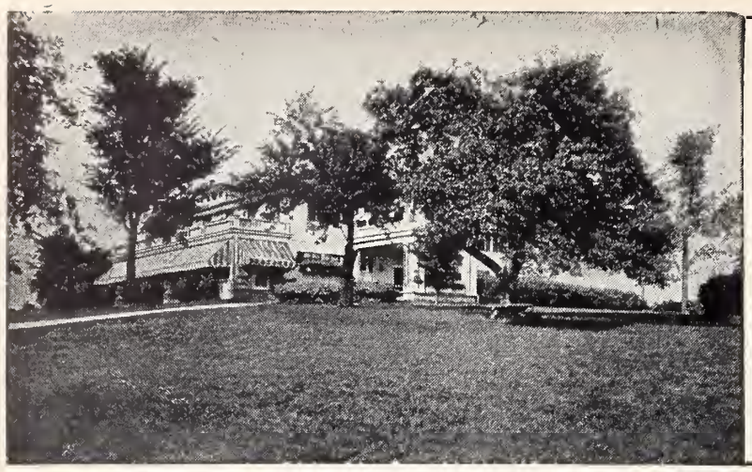

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quate care for all those who cannot pay full costs without help. The National Foundation ends 1950 with patient care funds exhausted and many bills unpaid. For the second successive year, its epidemic aid funds were insufficient for the job. The deficit must be met and its epidemic aid funds must be replenished.

During the years 1949-50 a total of some $47,000,000 was spent for polio patient care alone. There is no telling how much will be needed to cope with patients already stricken who will still need care in 1951, nor is there any way of predicting how many new cases will be added to the tragic roster.

The past three years have seen staggeringly high case incidence. No one knows if the trend will continue. But should there be a welcome "light" year ahead, the National Foundation's responsibilities are heavy.

The time to prepare is **now.** During the 1951 March of Dimes, January 15-31, give, and give again. Safeguard your stake in the fight against polio!

* * *

Henry W. Meyerding, M.D., of Rochester, Minnesota, assumed the presidency of the United States Chapter, International College of Surgeons, at the end of the 15th Annual Assembly of the College in Cleveland on November 3. Other officers elected are: President-elect, William R. Lovelace, M.D., Albuquerque, N. M.; Vice Presidents: W. W. Babcock, M.D., Philadelphia, O. S. Lowsley, M.D., New York, L. A. Buie, M.D., Rochester, Minn.; Moses Behrend, M.D., Philadelphia, C. J. Hunt, M.D., Kansas City; Secretary, Arnold S. Jackson, M.D., Madison, Wisc.; Treasurer, Oscar B. Nugent, M.D., Chicago; Members, Board of Trustees: Vernon A. Mastin, M.D., St. Louis, Mo., Elmer Hess, M.D., Erie, Pa., Oscar B. Nugent, M.D., Chicago, and E. L. Henderson, M.D., Louisville, Ky.

The International Board of Surgery Honorary Chairman is W. W. Babcock, M.D., of Philadelphia, and the other officers are: Chairman: R. W. McNealy, M.D., Chicago, Vice-Chairman: Harry E. Bacon, M.D., Philadelphia, Secretary: Karl A. Meyer, M.D., Chicago.

At this Assembly, 703 Doctors of Medicine were inducted into the College, including the following from Michigan: Fellows: H. F. Mullenmeister, M.D., Battle Creek, H. J. Van Duine, M.D., Grand Rapids, Ralph Wadley, M.D., Lansing, W. H. Honor, M.D., Wyandotte, J. J. Kraus, M.D., Detroit, R. G. Robinson, M.D., Detroit, W. H. Steffenson, M.D., Grand Rapids, C. L. Straith, M.D., Detroit; Associates: M. A. Martzowka, M.D., Roscommon, M. S. Roberts, M.D., Kalamazoo.

* * *

Nine hundred seventy-eight initiates were inducted into the American College of Surgeons at its Boston meeting of 1950. Included in that number were the following Michigan doctors: M. W. Alcorn, M.D., Bay City, W. O. Badgley, M.D., Lansing, Alexander Blain, III, M.D., Detroit, D. C. Burnham, M.D., Detroit, W. J. Butler, M.D., St. Joseph, O. A. Capano, M.D., Detroit, T. J. Cox, M.D., Ionia, F. C. Cretsinger, M.D., Kalamazoo, H. F. Crossen, M.D., Detroit, A. A. Darmstaetter, Jr., M.D., Birmingham, P. E. Derleth, M.D., Detroit, E. F. Eldredge, M.D., Detroit, E. P. Ellias, M.D., Dearborn, D. B. Galerneau, M.D., Centerline, H. H. Gass, M.D., Detroit, G. K. Glasgow, M.D., Detroit, Jack Hoogerhyde, M.D., Grand Rapids, D. C. Howe, M.D., Sault Ste. Marie, E. K. Isbey, M.D., Centerline, A. E. Lamberts, M.D., Grand Rapids, W. A. Lange, M.D., Detroit, A. G. Lasichak, M.D., Detroit, Manuel Levin, M.D., Detroit, S. S. Levine, M.D., Detroit, R. H. Lillie, M.D., Ann Arbor, H. A. Machin, M.D., Kalamazoo, H. G. McClintock, M.D., Ann Arbor, H. D. McEachran, M.D., Iron Mountain, S. L. Moleski, M.D., Grand Rapids, R. T. Murphy, M.D., Detroit, M. M. Musselman, M.D., Eloise, A. S. Narotzky, M.D., Ishpeming, R. A. Poirier, M.D., Detroit, D. A. Pollock, M.D., Port Huron, M. S. Roberts, M.D., Kalamazoo, R. G. Robinson, M.D., Detroit, G. L. Schaiberger, M.D., West Branch, Geza Schinagel, M.D., Detroit, M. S. Sharp, M.D., Lansing, M. W. Shellman, M.D., Grand Rapids, E. R. Sherrin, M.D., Detroit, H. E. Sloan, Jr., M.D., Ann Arbor, P. W. Smith, M.D., Ann Arbor, A. L. Stanley, M.D., Lansing, E. L. Stefani, M.D., Detroit, R. S. Steffe, M.D., Flint, C. S. Stevenson, M.D., Detroit, N. H. Sullenberger, M.D., Pontiac, D. C. Thomson, M.D., Ann Arbor, M. B. Tidey, M.D., Grand Rapids, A. H. Ulmer, Jr., M.D., Port Huron, and R. R. Wessels, M.D., Birmingham.

* * *

J. S. DeTar, M.D., Milan, Councilor of the 14th District, presented the following talks during the months of October and November: October 9, Detroit Association of Insurance Agents, on "Socialized Medicine in the Light of the Hoover Commission Report"; October 18, Michigan State College Extension Groups, Ann Arbor, on "Socialized Medical Care for the People";

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October 23, American Legion, Milan, on "The Veteran and Socialized Medicine"; October 24, Tecumseh Rotary Club, on "Do We Want Socialized Medicine, or Don't We?"; November 1, Daughters of the American Revolution, Jackson, on "Socialized Medicine; Do We Really Want It?"; November 2, Monroe Woman's Club, on "A Critical Review of the Socialized Medicine Problem"; November 3, Livingston County Medical Society on "Problems of the Profession in 1950"; November 7, Wyandotte Rotary Club on "Socialized Medicine in the Light of the Hoover Commission Report"; November 7, Wyandotte Woman's Study Club, on "Today is the Day"; November 8, B'nai B'rith, Pontiac, on "A Critical Review of the Problem of Socialized Medicine in the Light of the Hoover Commission Report Findings"; November 14, Monroe Rotary Club, Monroe, on "You Are The Doctor"; and on November 15 before the Monroe Kiwanis Club, Monroe, "Do We Want Socialized Medicine, or Don't We?"

* * *

"L. Fernald Foster, M.D., Bay City, Secretary of the Michigan State Medical Society, did a very able job of answering the advertisement of the CIO National Health Committee—whatever that is—in a fifteen minute radio broadcast on November 1 in Detroit, a union stronghold."—AMA Secretary's Letter (G. F. Lull, M.D.), November 13, 1950.

* * *

The Sixth National Conference on Rural Health, sponsored by the American Medical Association, will be held at the Peabody Hotel, Memphis, Tenn., February 22-23-24, 1951.

* * *

The American Urological Society's south central branch will hold its seminar in Dallas at the Adolphus Hotel, January 29-February 2. For program write R. E. VanDusen, M.D., Chairman, 721 Medical Arts Building, Dallas, Texas.

On Diagnosing Pulmonary Tuberculosis . . . "Patients with minimal disease may raise no sputum or the small amounts obtained may be repeatedly negative by direct smear. It is recommended that patients submit at least four or five single specimens. If no acid-fast bacilli are found by direct smear, one should immediately submit either sputum or fasting gastric contents to be examined by culture and guinea pig inoculation."—From *Is It TB?,* a pamphlet on the diagnosis of pulmonary tuberculosis prepared for general practitioners by the American Trudeau Society — John W. Towey, M.D., Pinecrest Sanatorium, Powers, Committee Chairman.

Copies are available from local and state tuberculosis associations.

Michigan Tuberculosis Association

The Annual Cancer Course at the University of Michigan Medical School will be held at the University Hospital, Ann Arbor, Michigan, January 16-19, 1951. The teaching program is divided as follows:

General Lectures: (Speakers to be announced later).

Clinic Sessions: (Small groups). Demonstration of patients.

Symptomatology, gross appearance of lesions, methods of examination, of biopsy, evaluation of clinical status, indications for treatment. Didactic lecture methods will not be used in clinic sessions.

Pathology: Microscopic pathology. Emphasis on what constitutes adequate biopsy material, proper procedure of biopsy, evaluation of degree of malignancy, estimation of clinical course, etc.

Round table discussion of the work each day.

Further information and application blanks may be obtained from Dr. H. H. Cummings, Chairman, Department of Postgraduate Medicine, University Hospital, Ann Arbor, Michigan.

* * *

Russell N. DeJong, M.D., of Ann Arbor, Michigan, is the Editor-in-Chief of the new official publication *Neurology* just announced by the American Academy of Neurology. The first issue will be the January, 1951 number.

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SURGERY OF THE SHOULDER. By A. F. DePalma, M.D., James Edwards Professor of Orthopedic Surgery and Head of the Department, Jefferson Medical College, Philadelphia; Attending Orthopedic Surgeon, Jefferson Medical College Hospital, Philadelphia, Methodist Episcopal Hospital, Philadelphia, St. Agnes Hospital, Philadelphia. With 454 Illustrations. Philadelphia: J. B. Lippincott Co., 1950. Price $17.50.

Orthopedic surgeon DePalma has assembled an amazing amount of useful material, profusely illustrated with fine photographs, accurate anatomical and operative sketches and pathological plates in the 424 pages of this volume. This treatise should become a classic, very useful to the medical student as a source book, and of great value to the orthopedic surgeon and the physician who has a good percentage of traumatic work in his practice.

Each of the eleven chapters has a very comprehensive bibliography, in spite of the complete manner in which every possible derangement of the shoulder is discussed. An introductory chapter on embryology is followed by exceptional new work of the author on anatomical variations of the shoulder ligaments, capsule and muscles, stressing the degenerative lesions of the cuff and of the scapulohumeral joint, with his own observations derived from a large series of anatomical dissections and autopsies.

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tendinitis with their variations, are well handled as to diagnosis and treatment, with a warning against manipulation of the frozen shoulder. Dislocations and fractures are well illustrated and discussed, with fine illustrations of the non-operative and operative treatment.

The section on shoulder pain of neurogenic origin and obstetric paralysis has some original ideas of the author on cervical rib syndrome, scalenus anticus syndrome, subcoracoid pectoralis minor syndrome and costoclavicular syndrome which are very practical, and the differential diagnosis of cervical intervertebral disc injuries. Bone tumors of the shoulder joint and surgical approaches and procedures conclude this fine work, both topics being presented completely, but avoiding unnecessary detail. S. B. W.

BRONCHOESOPHAGOLOGY. By Chevalier Jackson, M.D., Sc.D., LL.D., F.A.C.S., Honorary Professor of Bronchoesophagology and Laryngeal Surgery, Temple University, Philadelphia; and Chevalier L. Jackson, M.D., M.Sc., F.A.C.S., Professor of Bronchoesophagology and Laryngeal Surgery, Temple University, Philadelphia. 366 pages with 260 figures. Philadelphia and London: W. B. Saunders Company, 1950. Price $12.50.

The intensely growing interest in bronchoscopy and the exhaustion of the current texts has led the authors to produce another volume. All the very latest techniques and procedures are incorporated. The book is plain in style, well illustrated, and directly to the point. It shows in detail the necessary things to do for a successful operation, and helps to a true understanding of what the operator sees. A wonderful aid and an excellent text.

THE OTHER SIDE OF THE BOTTLE. By Dwight Anderson. New York: A. A. Wyn, Inc., 1950. Price $3.00.

Mr. Anderson has given us a most valuable addition to the story of Alcoholics Annonymous. He tells of the condition of the true alcoholic, the depths to which he goes, and the rebirth when he is finally accepted and uplifted by that great group of hard-working persons who make and keep their own salvation by the continuation of service at every conceivable inconvenient hour. The worker in this field is doing a reconstruction of humanity unsurpassed in this branch of endeavor. This book is very interesting for the person interested in a well-told problem, and an inspiration to the groping derelict.

PRINCIPLES OF PUBLIC HEALTH ADMINISTRATION. By John J. Hanlon, M.S., M.D., M.P.H., Associate Professor of Public Health Practice, School of Public Health, University of Michigan and Chief Medical Officer and Associate Chief of Party, Bolivia, The Institute of Inter-American Affairs. 48 Illustrations. St. Louis: The C. V. Mosby Co., 1950. Price $6.00.

Another book by a Michigan author. This textbook is very complete, giving the background and a survey of public health methods and achievements in America.

The first part of the book is devoted to organizational considerations, professional factors, management, legal considerations and the governmental aspects of public health. These topics require three and six chapters, respectively.

The second half of the book, twelve chapters, is devoted to specific problems and material such as vital statistics, control of communicable diseases, environmental health, public health, nursing, to mention just a few.

Dr. Hanlon's literary style is very good, and his book is replete with tables, statistics and much general information—an outstanding contribution.

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Surgical Technic, Surgical Anatomy and Clinical Surgery, four weeks, starting February 5, March 5.
Surgical Anatomy and Clinical Surgery, two weeks, starting February 19, March 19.
Surgery of Colon and Rectum, one week, starting March 5.
Basic Principles in General Surgery, two weeks, starting April 2.
Gallbladder Surgery, ten hours, starting April 23.
Fractures and Traumatic Surgery, two weeks, starting March 19.

GYNECOLOGY—Intensive Course, two weeks, starting February 19.
Vaginal Approach to Pelvic Surgery, one week, starting March 5.

OBSTETRICS—Intensive Course, two weeks, starting March 5.

MEDICINE—Intensive General Course, two weeks, starting April 23.
Gastro-enterology, two weeks, starting May 14.
Gastroscopy, two weeks, starting March 5.
Electrocardiography and Heart Disease, two weeks, starting March 19.

PEDIATRICS—Intensive Course, two weeks, starting April 2.
Informal Clinical Course every two weeks.

UROLOGY—Intensive Course, two weeks, starting April 16.
Cystoscopy, Ten Day Practical Course, every two weeks.

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M.D. WANTED: Good opening for young doctor of medicine in Colon, Michigan; 1,002 population, located in good farming and resort community. No other doctor within ten miles; three hospitals within 25 minutes drive; five churches, twelve-grade school on the University and North Central Association list; two factories, active Lions Club, good bank and theater. Excellent opening for the right man. Contact: Gamble's Drug Store or Charles Williams, Village Clerk, Colon, Michigan.

NEEDED: A young Doctor of Medicine can find an excellent opportunity in Ubly, Michigan. Our former doctor of forty years passed away. We have a population of eight hundred and located in an agricultural area. Have a high school, milk plant, elevator and electric generating plant. Hospital in Bad Axe, Michigan. Contact Village President.

WANTED: Young physician who has completed one year of internship and has finished military service or draft exempt who would like to be associated in a group that has its own clinic and sixty-bed hospital with twenty bassinets. Our group preserves the independence of solo practice, yet gives the usual group advantages. Opportunity to develop in regular branches of medicine and surgery while carrying on a good practice. Excellent remuneration with guarantee. Location—Metropolitan Detroit area. Position available immediately. Write Box 7, Michigan State Medical Society, 2020 Olds Tower Building, Lansing 8, Michigan.

WANTED PHYSICIAN, G.P. looking to specialty later. A Clinic-Hospital group. Young, married preferred. Michigan registration mandatory. Can furnish quarters for apartment in hospital, and food. Dearborn Clinic and Diagnostic Hospital, 4840 Maple Road, Dearborn, Michigan.

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